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DESCRIPTION OF ORGANIZATION

Part 1

Introduction

Sec. 22a-1-1. Creation and authority

The Department of Environmental Protection (DEP) was established in the executive branch of the state government by Public Act 872 of the 1971 General Assembly. The department operates according to powers conferred in various titles of the General Statutes relating to management, protection and preservation of the air, water, land, wildlife and other natural resources of the state, and according to the constitutions of Connecticut and the United States. The principal titles governing the operation of the department are Title 15, 19, 22a, 23, 24, 25, and 26.

(Effective October 19, 1972)

Sec. 22a-1-2. Purpose and functions

(a) The Department of Environmental Protection was created to implement the environmental policy of the state, as declared by the General Assembly and expressed in the General Statutes. This policy is to conserve, improve and protect the natural resources and environment of Connecticut and to control air, land and water pollution in order to enhance the health, safety and welfare of the people of Connecticut. It is further this policy to improve and coordinate environmental plans, functions, powers and programs among state, federal, regional and local governments, other public and private organizations, and concerned individuals; and to manage the basic resources of air, land and water in order that the state may fulfill its responsibility as trustee of the environment for the present and future generations.

(b) In accordance with this policy directive and the authority of the General Statutes, the department performs a wide variety of research, educational, management, standard-setting, monitoring, licensing, and enforcement activities. In addition, the department supports and coordinates research and pollution control activities by local government agencies, private and public groups, individuals and educational institutions. The department also acts as the official agent of the state in most matters affecting the natural environment under applicable federal laws, and as the official agent of local and regional authorities concerning the grant or advance of many federal or other funds or credits to the state or to its political subdivisions.

(c) The activities of the department reflect a recognition that the natural environment and the life forms it supports exist in a delicate, interrelated and complex balance. The department seeks to encourage social and economic development in Connecticut in a manner which preserves this balance.

(Effective October 19, 1972)

Sec. 22a-1-3a. Basic organization

(a) The Department of Environmental Protection basically consists of (1) the Office of the Commissioner, including a staff services unit and a business administration unit; (2) The Division of Environmental Quality; and (3) the Division of Conservation and Preservation. The Commissioner, with the assistance of his staff, directs overall planning, coordination and control of all Departmental programs, provides a broad range of administrative services to the department and receives, administers, and expends the Department's funds.

The Division of Environmental Quality, under the direction of a Deputy Commissioner, administers and enforces the statutes and regulations governing pollution

control within the department's jurisidiction and develops programs to protect the health and well-being of the public through the enhancement of environmental quality. The Division of Conservation and Preservation under the direction of the Deputy Commissioner, manages the natural and recreational resources areas under the direct control of the department, establishes programs to enhance the productivity of the state's natural resources, and provides for management and protection of unique and endangered natural resources.

(b) Definitive statements of the Department's organization, policies, procedures, assignments of responsibility, and delegations of authority will be contained in a Directive Manual. Copies will be available for public inspection in the Business Administration Unit, Department of Environmental Protection, State Office Building, Hartford, Connecticut, and in such other places as the director of administration may arrange.

(Effective April 27, 1978)

Sec. 22a-1-4. Location of principal office

The Department of Environmental Protection is located in the State Office Building, 165 Capitol Avenue, Hartford, Connecticut, 06115. Normal business hours are from 8:30 to 4:30 daily, except Saturdays, Sundays, and holidays.

(Effective October 19, 1972)

Part 2

Course and Method of Operation

Subpart A. Office of the Commissioner

Sec. 22a-2-1a. Commissioner

The commissioner of environmental protection provides overall supervision and direction to the activities of the department. He is appointed by the governor. The commissioner is assisted by one or more executive assistants, a director of staff services, and a director of business administration who advise him on matters concerning their respective field of experience and expertise.

(Effective April 27, 1978)

Sec. 22a-2-2a. Director of staff services

The director of staff services assists the commissioner with all phases of departmental programs and directs the activities of the staff services unit which consists of five sections: Information and Education; Adjudication; Planning and Coordination; Land Acquisition; and the Natural Resources Center.

(Effective April 27, 1978)

Sec. 22a-2-3a. Director of information and education

The director of information and education coordinates the dissemination of information to the public and directs educational programs to inform groups, individuals, and other government agencies of Connecticut's environmental problems and of the department's activities. One of his principal duties is to present, in a clear and comprehensive manner, the complex concepts and interrelationships which underlie the delicate balances in Connecticut's ecological system.

(Effective April 27, 1978)

Sec. 22a-2-4a. Chief hearings officer, adjudication section

The chief hearing officer directs the activities of the adjudication section and advises the commissioner on all hearings. He is responsible for all public and private hearings including training and assignment of hearings officers and completion of recommendations made as a result of such hearings. He also reviews hearings procedures to see that they meet all legal requirements. A primary responsibility of this office is to assure that the right of the public to be heard, fully and openly, is not abrogated or unnecessarily restricted. He shall also be responsible for reviewing existing departmental regulations and for promulgating new regulations when necessary. He shall maintain a complete file on all regulations.

(Effective April 27, 1978)

Sec. 22a-2-5a. Chief of land acquisition

The chief of land acquisition is responsible for acquiring land interests for the state. Acquisition is normally by devise, gift, exchange or purchase of a fee, lease or easement. The chief and his staff also provide assistance to municipalities seeking acquisition and development funds under federal, state and municipal open space programs, and coordinate with other units in reviewing land management proposals.

(Effective April 27, 1978)

Sec. 22a-2-6a. Director, natural resources center

The director of the natural resources center is responsible for the collection, integration, and dissemination of natural resource (earth material, topography, hydrology, biology, and atmospheric) data needed to make better environmental and land use decisions. He develops and maintains, in a central location, a natural resource data handling system containing the products of past systematic data collections and coordinates future data collection programs through the Connecticut Geological and Natural History Survey. The director and staff develops and participates in natural resource training programs, and provides technical assistance to state and local government agencies to aid them in performing their authorized duties through the specialized expertise of the center.

(Effective April 27, 1978)

Sec. 22a-2-7a. Director of planning and coordination

The director of planning and coordination directs analytical studies of the environmental and economic impact of pollution abatement programs, evaluates policy and program alternatives and recommends policies and programs to the commissioner. He coordinates relations with other federal and state agencies and local governments through review of federal and state funded projects requiring environmental impact statements and assists local governments and the public by coordinating permit applications. He is responsible for interdepartmental coordination, of the staff services unit, division of environmental quality, and division of conservation and preservation in cross discipline policy development and planning projects.

(Effective April 27, 1978)

Sec. 22a-2-8a. Director of administration, business administration unit

(a) The director of administration directs the preparation of the budget and the management of the departmental funds. He is responsible for the procurement and accountability of federal grants-in-aid to the department and to municipalities.

(b) The director directs the personnel activities of the department and is responsible for the purchase and inventory of all equipment and supplies.

(c) The director is responsible for receipt of all departmental revenues, the registration of x-ray devices and the issuance of various permits to hunt, fish, and trap.

(d) The director is responsible for the development of a management information system and the cost analysis of departmental programs.

(e) The director shall assign to the assistant director of administration those administrative and management activities which the director determines are necessary to effectively and efficiently implement the responsibilities of the business administration unit. These activities may include, but are not limited to, financial management, budget preparation, federal grants administration, personnel administration, purchasing and inventory, licensing and revenue administration, management information systems and the formulation of administrative policy.

(Effective February 5, 1979)

Subpart B. Division of Environmental Quality

Sec. 22a-2-9a. Deputy commissioner of environmental quality

(a) The deputy commissioner for environmental quality directs the activities of the department with respect to administration of the statutes and regulations governing pollution control. He is responsible for developing and implementing new programs and policies designed to improve the quality of the environment, for enforcement of statutes and regulations, and for allocation of the division's manpower and budget resources.

(b) The deputy commissioner directs the activities of seven line units: Air Compliance, Water Compliance, Solid Waste Management, Water Resources, Hazardous Materials Management, Radiation Control, and Noise Control.

(Effective April 24, 1979)

Sec. 22a-2-10a. Director of air compliance

The director of air compliance is responsible for management of the state's air pollution control program. He administers Connecticut's air quality implementation plan and other federal and state programs which provide for abatement of air pollution from both mobile and stationary sources and development of programs to prevent concentrations of pollutants harmful to the public health and welfare. He is responsible for enforcement of state and federal regulations, investigation of complaints, monitoring and prediction of air pollutant concentrations, and the registration, inspection and regulation of new and existing stationary sources of air pollution.

(Effective April 27, 1978)

Sec. 22a-2-11a. Director of water compliance

The director of water compliance is responsible for the management of the state's water quality program. He administers federal and state permit programs for controlling discharges to the waters of the state. He is responsible for insuring compliance with pollution abatement regulations, issuing orders to abate water pollution, evaluation of the adequacy of industrial and sanitary waste treatment systems, the inspection, registration and issuance of permit conditions for discharge systems. He also is responsible for development of plans for establishing and attaining water quality standards.

(Effective April 24, 1979)

Sec. 22a-2-12a. Director of solid waste management programs

The director of solid waste management programs directs the development and implementation of state-wide plans for solid waste management and resource recovery. He supervises the regulation of volume reduction plants and ultimate disposal areas and coordinates with representatives of business, industry and government to encourage the development of public and private programs for solid waste management and resource recovery and reprocessing. With assistance of his staff, he issues permits for all solid waste facilities and monitors compliance with permit conditions. He coordinates the implementation of the state solid waste plan with the Connecticut Resources Recovery Authority. He is also responsible for implementing all federal and state legislative requirements for solid waste management in Connecticut. He is also responsible for providing training and implementing the program for certifying the qualifications of operators of solid waste facilities.

(Effective April 27, 1978)

Sec. 22a-2-13a. Director of water resources

The director of water resources and his staff are responsible for managing the water resources of the state, except the use of water for waste assimilation. The principal activities of this unit are wetland preservation, flood control, implementation and administration of minimum flow standards for Connecticut streams and regulation of dam construction, dredging and construction of other structures in waterways. The director is responsible for planning and developing comprehensive programs in furtherance of the general statutes in each of these areas of responsibility.

(Effective April 27, 1978)

Sec. 22a-2-14a. Director of radiation control

The director of radiation control is responsible for administration of federal and state programs and regulations for the control of radioactive substances which have the potential for discharge to the environment and to which the public is exposed through medical, scientific, engineering, education and related activities. The director is responsible for supervising and registration and inspection of diagnostic and therapeutic x-ray devices and ionizing radiation sources, monitoring the environment for radioactive materials, the preparation of state plans and procedures for radiological emergencies involving nuclear facilities, and the implementation of radiological safety regulations.

(Effective April 27, 1978)

Sec. 22a-2-15a. Director of hazardous materials management

The director of hazardous materials management is responsible for implementing state and federal laws regulating the use of hazardous materials in the environment. The director supervises control of pesticide distribution and use, hazardous material spill prevention efforts, training of departmental personnel as well as other state and local personnel in the safe handling and disposal of hazardous materials, hazardous material spill response technical assistance, state agency assistance coordination for hazardous material spills, and hazardous materials disposal and enforcement efforts.

(Effective April 24, 1979)

Sec. 22a-2-16a. Director of noise control

The director of noise control administers a regulatory and consultative program for control of noise from stationary sources. Assistance is provided to local communi-

ties in the development of ordinances and programs. Upon complaint, noise sources are investigated and appropriate action instituted.

(Effective April 27, 1978)

Subpart C. Division of Conservation and Preservation

Sec. 22a-2-17a. Deputy commissioner

(a) The deputy commissioner for conservation and preservation manages and regulates the use of natural resources and land and water areas within the jurisdiction of the department. He is responsible for establishing seasons and conditions for hunting, fishing, and other recreational sports, for creating and maintaining fish, wildlife, and plant management programs, for managing state land and water interests.

(b) The deputy commissioner directs the activities of seven staff units: operations and maintenance, law enforcement, fisheries, forestry, property management, parks and recreation, and wildlife. Each unit is headed by a director or chief. In addition, the deputy commissioner supervises five regional field offices, whose personnel implement policies and programs coordinated, reviewed and developed by the staff units with the approval of the deputy commissioner.

(Effective February 5, 1979)

Sec. 22a-2-18a. Chief of operations and maintenance

The chief of operations and maintenance and his staff coordinates the development and administration of policies and programs in the division. The chief is the deputy commissioner's principal assistant. He coordinates the operations of the other staff units and the activities of the five regional offices. He is also responsible for the youth conservation corps program, the Portland supply depot, radio communications and the coordination of indian affairs.

(Effective April 27, 1978)

Sec. 22a-2-19a. Chief of law enforcement

The chief of law enforcement is responsible for enforcing state laws and administrative regulations governing the use of Connecticut's natural resource areas and the protection of wildlife within them. He trains and exercises technical program supervision over a field staff of enforcement officers who monitor compliance with laws, regulations, and licenses issued by other units in the division.

(Effective April 27, 1978)

Sec. 22a-2-20a. Chief of fisheries

The chief of fisheries heads a staff which provides technical supervision for inland and marine fish programs and commercial and recreational fishing. These programs include producing, stocking and managing inland fish; maintaining boat launch sites; investigating fish populations; providing consulting services for private owners of ponds, lakes and streams; and administration of federal aid programs as they pertain to fish and waterlife.

(Effective April 27, 1978)

Sec. 22a-2-21a. State forester/(state forest fire warden)

The state forester is responsible for providing technical supervision for managing trees and forests on state lands, for preventing and suppressing forest fires, for providing planting stock to other public and to private landowners, for providing

technical forestry advice and assistance to private landowners, loggers and primary wood processors, municipalities and other interested parties, for administration of the forest land tax law under provisions of Connecticut general statutes section 12-96 and section 12-107D, for operating the James L. Goodwin forest conservation center and for administering cooperative agreements with state and federal agencies and federal aid programs as they pertain to forestry and forest fire suppression.

(Effective April 27, 1978)

Sec. 22a-2-22a. Chief of property management

The chief of property management and his staff administer the department's property management program. Management includes all matters concerning leases, agreements, easements, land exchange, land records, in-house surveys, encroachments, annual inspections of state owned properties acquired with federal funds and other matters normally related to property management. They may assist in land acquisition programs at the request of the chief of land acquisition with the approval of the deputy commissioner.

(Effective April 27, 1978)

Sec. 22a-2-23a. Chief of parks and recreation

The chief of parks and recreation and his staff develop and administer Connecticut's recreational facilities and programs. The principal recreation programs include camping, swimming, boating, picnicking, trails, winter sports and heritage sites visitation.

(Effective April 27, 1978)

Sec. 22a-2-24a. Chief of wildlife

The chief of wildlife and his staff provide technical supervision for the purchase and liberation of wildlife, the improvement of habitat conditions for all wildlife on state owned and private lands, and the administration of federal aid programs as they pertain to wildlife management.

(Effective April 27, 1978)

Sec. 22a-2-25a. Regional field offices

The regional field offices implement the various programs of the division under the guidance of the various staff directors and chiefs. For purposes of program implementation, the state is divided into five regions: (1) Northwest quarter; (2) Southwest quarter; (3) Middle-eastern quarter; (4) Far eastern quarter; and (5) Marine district, comprising the area along Long Island Sound. A field office and staff exist in each region.

(Effective April 27, 1978)

Part 3

Public Information

Sec. 22a-3-1a. Policy

The policy of the department is to make available for public inspection all files, records, documents and other materials within its possession, unless prohibited by law.

(Effective April 27, 1978)

Sec. 22a-3-2a. Requests for information

(a) Requests for information should be made, whenever possible, directly to the unit in possession of the requested information. When the particular unit is not known or when information is requested concerning overall departmental matters, requests should be directed to the Director of Information and Education, Department of Environmental Protection, State Office Building, Hartford, Connecticut 06115.

(b) There is no prescribed form for requests for information. They should be sufficiently specific to permit easy identification of the information requested. Simple requests may be made orally, in person or by telephone.

(Effective April 27, 1978)

Sec. 22a-3-3a. Exemptions

Whenever a unit of the department receives a request for information which the director or chief of the unit considers exempt from disclosure, he will forward the request to the deputy commissioner of the relevant division. If the deputy commissioner determines that the requested information is not exempt from disclosure, he will instruct the referring director or chief to release it. If the deputy commissioner determines the information is exempt from disclosure, he will notify the person requesting it of his determination and the reason for it.

(Effective April 27, 1978)

Sec. 22a-3-4. Submission of materials

Submission other than petitions or applications, as defined in Secs. 22a-4-2, should be made directly to the unit in the department for whose use such materials are intended. Any person who submits materials should enclose a cover letter which states clearly and concisely the uses for which they are intended. Although the department will attempt to return unsolicited materials if requested, it cannot guarantee such return.

(Effective October 19, 1972)

RULES OF PRACTICE

Part 1

General

Secs. 22a-4-1—22a-4-8.

Repealed, September 26, 1985.

Part 2

Rule Making

Secs. 22a-5-1—22a-5-2.

Repealed, September 26, 1985.

Part 3

Petitions

Secs. 22a-6-1—22a-6-2.

Repealed, September 26, 1985.

Part 4

Licenses

Secs. 22a-7-1—22a-7-4.
Repealed, September 26, 1985.

Part 5

Orders

Subpart A. Proceeding Before Hearing

Secs. 22a-8-1—22a-8-4.
Repealed, September 26, 1985.

Subpart B. Hearing

Secs. 22a-8-5—22a-8-7.
Repealed, September 26, 1985.

Subpart C. Decision

Secs. 22a-8-8—22a-8-9.
Repealed, September 26, 1985.

Subpart D. Cease and Desist Orders and Emergency Orders

Secs. 22a-8-10—22a-8-11.
Repealed, September 26, 1985.

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Connecticut Environmental Policy Act

Sec. 22a-1a-1. Definitions

As used in Sections 22a-1a-1 through 22a-1a-12, inclusive:

1. **Act** means Sections 22a-1 to 22a-1f of the Connecticut General Statutes.

2. **Action** means an individual activity or a sequence of planned activities initiated or proposed to be undertaken by an agency or agencies, or funded in whole or in part by the state. Actions include, but are not limited to, capital improvements, alterations, repairs, or additions to the real property of the state; acquisition of real property for the purpose of capital improvements; lease/purchase agreements; grants-in-aid or financial assistance for housing, business, industry, restoration or demonstration projects; or other proposed activity for which an agency exercises judgment or discretion as to the propriety of that action.

3. **Environment** means the physical, biological, social, and economic surroundings and conditions which exist within an area which may be affected by a proposed action including land, air, water, minerals, flora, fauna, noise, objects of historic or aesthetic significance and community or neighborhood characteristics.

4. **Environmental Assessment** means a process to determine if a proposed action listed under Section 22a-1a-4 (b) (2) may have a significant impact on the environment.

5. **Environmental Classification Document** means a document used by a sponsoring agency in conjunction with these regulations to determine which of its actions may have significant impacts.

6. **Environmental Impact Evaluation** means a detailed written document concerning the environmental impacts of a proposed action.

7. **Finding of No Significant Impact** means a written document concerning the environmental impacts of a proposed action listed in an environmental classification document which would not have a significant environmental impact.

8. **Sponsoring Agency** means an agency responsible for the preparation of environmental classification documents, environmental impact evaluations, and findings of no significant impact.

(Effective November 6, 1978)

Sec. 22a-1a-2. Determination of sponsoring agency

(a) Each agency responsible for the primary recommendation or initiation of actions is considered a sponsoring agency for the purpose of preparing environmental classification documents, environmental impact evaluations, and findings of no significant impact. When more than one agency is involved in the primary recommendation or initiation of an action, one of those agencies shall act as the sponsoring agency. The participating agency which is determined not to be the sponsoring agency shall share the responsibility for the scope and content of documents prepared pursuant to these regulations.

(b) The determination of sponsoring agency shall be based on:

1. Magnitude of agency's involvement;
2. Activity approval/disapproval authority;
3. Expertise concerning the action's environmental effects;
4. Duration of agency's involvement;
5. Sequence of agency's involvement.

(c) The sponsoring agency may delegate the task of preparing environmental impact evaluations and findings of no significant impact. When such a document is prepared under contract for the sponsoring agency, the contractor shall execute

a disclosure statement specifying that it has no financial interest in the outcome of the action. If an environmental document is prepared by contract, the sponsoring agency and other participating agencies shall furnish guidance and participate in the preparation and shall independently evaluate the document prior to its general circulation.

(Effective November 6, 1978)

Sec. 22a-1a-3. Determination of environmental significance

Significant effect means substantial adverse impact on the environment. The significance of a likely consequence should be assessed in connection with its setting, its probability of occurring, its duration, its irreversibility, its controllability, its geographic scope, and its magnitude. The following factors shall be considered by agencies in preparation of environmental classification documents and in determining whether a proposed action may be expected to have a significant environmental effect.

(a) **Direct and indirect effects.** Direct effects are the primary environmental consequences which would result from the implementation of a proposed action. Indirect effects are the secondary consequences on local or regional social, economic or natural conditions or resources which could result from additional activities (associated investments and changed patterns of social and economic activities) induced or stimulated by the proposed action, both in the short-term and in the long-term. For the purposes of determining environmental significance, direct and indirect effects on the environment shall be considered, including but not limited to the following potential or actual consequences:

(1) Impact on air and water quality or on ambient noise levels;

(2) Impact on a public water supply system or serious effects on groundwater, flooding, erosion or sedimentation;

(3) Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows;

(4) Disruption or alteration of an historic, archeological, cultural, or recreational building, object, district, site or its surroundings;

(5) Effect on natural communities and upon critical species of animal or plant and their habitats; interference with the movement of any resident or migratory fish or wildlife species;

(6) Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact;

(7) Substantial aesthetic or visual effects;

(8) Inconsistency with the written and/or mapped policies of the Statewide *Plan of Conservation and Development* and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency;

(9) Disruption or division of an established community or inconsistency with adopted municipal and regional plans;

(10) Displacement or addition of substantial numbers of people;

(11) Substantial increase in congestion (traffic, recreational, other);

(12) A substantial increase in the type or rate of energy use as a direct or indirect result of the action;

(13) The creation of a hazard to human health or safety;

(14) Any other substantial impact on natural, cultural, recreational or scenic resources.

(b) **Cumulative Impacts.** Cumulative impacts are the impacts on the environment which result from the incremental impact of the action when added to other past, present or reasonably foreseeable future actions to be undertaken by the sponsoring agency. For the purposes of these regulations, cumulative impacts include the incremental effects of similar actions with similar environmental impacts and the incremental effects of a sequence of actions undertaken pursuant to an ongoing agency program which may have a significant environmental impact, whereas the individual component actions would not.

(Effective November 6, 1978)

Sec. 22a-1a-4. Environmental classification documents

(a) Each sponsoring agency shall prepare an environmental classification document.

(b) The agency environmental classification document shall include:

(1) A list of typical agency actions which may have signficant impacts on the state's land, water, air or other environmental resources, or which could serve short-term to the disadvantage of long-term environmental goals, thereby requiring the preparation of an environmental impact evaluation.

(2) A list of typical agency actions whose degree of impact is indeterminate, in the absence of information on the proposed location and scope of a specific action, but which could have significant environmental impacts. For each of these listed actions, when one is proposed, the sponsoring agency shall undertake an environmental assessment, using the criteria set forth in Section 22a-1a-3, to determine whether it shall prepare an environmental impact evaluation or a finding of no significant impact.

(3) A list of typical federal/state actions for which environmental impact statements are prepared pursuant to the National Environmental Policy Act, and for which the agency is the cognizant or sponsoring agency in the state.

(Effective November 6, 1978)

Sec. 22a-1a-5. Review of agency environmental classification documents

(a) Each sponsoring agency shall file its environmental classification document with the Office of Policy and Management not later than sixty (60) days after the effective date of these regulations.

(b) Each environmental classification document shall be made available to the Department of Environmental Protection, the Council on Environmental Quality, and other appropriate governmental agencies as determined by the sponsoring agency. The sponsoring agency shall also make it available to interested persons.

(c) The sponsoring agency shall publish a notice of the availability of its environmental classification document in the Connecticut Law Journal and such other newspapers, journals, and periodicals as it deems adequate to insure adequate public notice.

(d) Any person may comment, in writing, on any environmental classification document within forty-five (45) days of the date of its availability. All comments should be forwarded to the Office of Policy and Management, which shall distribute them to the Department of Environmental Protection, the Council on Environmental Quality, and the sponsoring agency.

(e) The Office of Policy and Management, following consultation with the Department of Environmental Protection, the Council on Environmental Quality and the sponsoring agency shall approve each environmental classification document, or disapprove it with recommendations for change. Upon approval, each environmental

classification document shall be filed with the Office of Policy and Management and shall be the basic criterion for the agency's determination whether or not to prepare an environmental study.

(Effective November 6, 1978)

Sec. 22a-1a-6. Revision of environmental classification documents

Each environmental classification document shall be amended by the sponsoring agency to reflect significant changes in the agency's programs or operations. Each sponsoring agency shall review and revise as necessary its environmental classification document at least every two years following initial approval by the Office of Policy and Management.

(Effective November 6, 1978)

Sec. 22a-1a-7. Environmental impact evaluations

(a) Environmental impact evaluations shall be prepared for those proposed actions listed in an environmental classification document which may have significant environmental impacts. They shall provide full and fair discussions of environmental impacts, inform decision makers and the public of all reasonable alternatives, and compare the impacts of the alternatives on the environment.

(b) An environmental impact evaluation shall be prepared as close as possible to the time an agency proposes an action. The evaluation shall be prepared early enough so that it can practically serve as an important contribution to the decision-making process and shall not be used to rationalize or justify decisions already made. Preparation of an environmental impact evaluation shall not prevent an agency from conducting contemporaneous engineering, economic, feasibility and other studies which do not otherwise commit the agency to commence or engage in such action or limit the choice of reasonable alternatives.

(c) The sponsoring agency shall conduct an early and open process for determining the scope of issues to be addressed in an environmental impact evaluation. Through the process, the sponsoring agency shall identify the significant issues to be analyzed in detail, and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review. The agency shall invite the participation of federal, state and local agencies with special expertise or jurisdiction by law with respect to any relevant environmental impact, and other interested or affected persons. Such consultation may be integrated with any other early planning meetings or early participatory process the agency has.

(d) If an agency is proposing an action which is an interdependent part of a sequence of planned activities which may have a significant environmental impact and depends on the entire sequence for its justification, or which is part of a program of similar activities, the cumulative impact of which may have a significant environmental impact, a single environmental impact evaluation shall be prepared for that sequence or program. Such an environmental impact evaluation shall cover future component actions of a program or sequence of activities provided that there is no substantive change in the action's environmental setting, environmental impacts or alternatives which would merit a revision to the environmental impact evaluation. Subsequent environmental impact evaluations shall be prepared by the sponsoring agency when such actions have environmental impacts not adequately discussed in the initial evaluation.

(e) An environmental impact evaluation shall be clear, concise, and to the point, and written in plain language so that it may be understood by the general public.

Impacts shall be discussed in proportion to their significance and the magnitude of the action.

(f) Environmental impact evaluations shall be prepared in a manner which will encourage clear presentation and independent evaluation of the proposed action and reasonable alternatives to it. Summary technical data, maps and diagrams should be presented as to be understandable to the general public. An agency may incorporate material by reference into an environmental impact evaluation when to do so will cut down on bulk without impeding agency and public review of the action. Appendices and referenced documents shall be reasonably available for review, except those materials based on proprietary data.

(g) The environmental impact evaluation shall include:

(1) A brief summary which adequately and accurately summarizes the focus and conclusions of the evaluation. The summary shall include the appropriate agency contact person and an environmental impact evaluation distribution list.

(2) A description of the proposed action, a statement of its purpose and need and a justification for the action. Major assumptions concerning growth and population used to justify the action shall be clearly identified. The location and boundaries of the proposed action, if applicable, shall be indicated on a map of appropriate scale.

(3) A description of the environment of the area which would be affected by the proposed action, as it currently exists prior to commencement of the action. This description shall include the cultural, economic, recreational and ecological characteristics and activities, both in the immediate location of the proposed action and areas that would be affected by the action.

(4) A description and analysis of the reasonable alternatives to the proposed action, particularly those which might enhance environmental quality or avoid some or all of the adverse environmental effects. This discussion shall include but not be limited to alternatives such as taking no action or substituting an action of a significantly different nature which would provide similar benefits with different environmental impacts.

(5) A list of the necessary licenses, permits, certifications or other approvals required to implement the action from government agencies, boards or commissions having relevant regulatory jurisdiction.

(6) A discussion of the potential environmental impact of the proposed action. This discussion shall include:

(A) Direct environmental effects. The primary consequences for the environment during and subsequent to the activity as set forth in Section 22a-1a-3 with emphasis on the most significant effects.

(B) Indirect environmental effects. The secondary consequences for the environment as set forth in Section 22a-1a-3 which result from changes in the pattern of land use, population density, and related effects on air and water or other natural resources.

(C) The relationship of the proposed action to approved land use plans, policies and controls for the affected areas.

(D) Any probable adverse environmental effects which could not be avoided if the proposed action were implemented.

(E) Any irreversible and irretrievable commitments of resources which would occur should the proposed action be implemented. Resources means materials devoted to the proposed action and the natural and cultural resources that would be committed to loss or destruction by the action.

(F) Mitigation measures to the proposed action including: limiting the degree or magnitude of the action; rectifying by repairing, rehabilitation or restoring the

impacted environment; reducing or eliminating the impact over time by preservation and maintenance operations; compensating for the impact by replacing or providing substitute resources or environments.

(G) The effects of the proposed activity on energy consumption and energy conservation.

(H) An analysis of the short-term and long-term economic, social and environmental costs and benefits of the proposed action. A comparison of benefits and costs shall be made for reasonable alternatives. The comparative analysis shall explicitly state and evaluate nonquantifiable benefits and costs as well as quantitative benefits and costs.

(Effective November 6, 1978)

Sec. 22a-1a-8. Notice, distribution, and review of environmental impact evaluations

(a) The sponsoring agency shall publish notice of the availability of environmental impact evaluations in accordance with Section 22a-1 (d) of the Act and shall utilize such other newspapers, journals and periodicals as it deems necessary to insure adequate public notice.

(b) The sponsoring agency shall distribute environmental impact evaluations in accordance with Section 22a-1 (d) of the Act. In addition, the sponsoring agency shall distribute environmental impact evaluations to persons who have demonstrated an interest or concern in the proposed action, and other persons it deems necessary to insure effective public participation.

(c) Any person may comment, in writing, on an environmental impact evaluation. The initiating agency shall provide a time period of not less than forty-five (45) days for review and comment. If the proposed action is of unusual scope or complexity, the review period may be extended to sixty (60) days.

(Effective November 6, 1978)

Sec. 22a-1a-9. Determination of adequacy

(a) A sponsoring agency shall review all comments submitted on an environmental impact evaluation and any other pertinent information it obtains following circulation of an environmental impact evaluation, and conduct further environmental study and analysis or amend the evaluation if it determines appropriate. In all cases, the sponsoring agency shall prepare responses to the substantive issues raised in review of the environmental impact evaluation, and shall forward such responses, as well as any supplemental materials or amendments and all comments received on the evaluation to the Office of Policy and Management.

(b) The sponsoring agency shall prepare a concise public record of decision, taking into consideration its findings in the environmental impact evaluation, and comments received on that evaluation which it shall forward to the Office of Policy and Management. The record of decision shall state:

(1) The agency's decision relative to proceeding with the proposed action.

(2) Whether all practicable means to avoid or minimize environmental harm have been adopted, and if not, why they were not.

(c) To insure the sponsoring agency has complied with the procedural requirements of the Act and these regulations, it shall forward to the Office of Policy and Management;

(1) Copies of required notices and other advertisements of the availability of an environmental impact evaluation;

(2) A brief summary of the public hearing record, in those cases when one is conducted in accordance with Section 22a-1a-11;

(3) A brief summary of consultation with agencies and other persons prior to and during the preparation of the environmental impact evaluation as required by Section 22a-1a-7 (b).

(d) The Office of Policy and Management shall make a determination as to the adequacy of an environmental impact evaluation in accordance with Section 22a-1 (e) of the Act. If the Office of Policy and Management determines that the environmental impact evaluation is inadequate it shall make such determination specifying the areas of inadequacy with reference to the Act and these regulations.

(Effective November 6, 1978)

Sec. 22a-1a-10. Finding of no significant impact

(a) If an agency, in the course of an environmental assessment, finds that a proposed action listed in its environmental classification document would not have a significant environmental impact, it shall prepare a finding of no significant impact.

(b) The finding of no significant impact shall include:

(1) A description of the proposed action;

(2) A description of the environment of the area which would be affected by the proposed action, as it currently exists;

(3) The probable impact of the proposed action on the environment, including both primary and secondary effects.

In the finding of no significant impact, the agency shall include information in reasonable detail to support its belief that the environmental impact which would ensue from the proposed action would not be significant.

(b) The finding of no significant impact shall be submitted by the sponsoring agency to the Office of Policy and Management, the Department of Environmental Protection, the Council on Environmental Quality, and other appropriate agencies as determined by the sponsoring agency. It shall also be submitted to the town clerk of each municipality affected by the action, and shall be made available to any interested persons.

(d) Any agency or person may comment, in writing, on a finding of no significant impact within thirty (30) days of the date of its availability. All comments shall be sent to the sponsoring agency, which shall forward them to the Office of Policy and Management.

(e) If no dissenting comments regarding the environmental significance of the proposed action are filed during the comment period, the sponsoring agency may proceed with implementation of the action following notification to the Office of Policy and Management. If one or more dissenting comments are filed during the comment period, the Office of Policy and Management shall recommend, following consultation with the Department of Environmental Protection, the Council on Environmental Quality, and the sponsoring agency, within fifteen (15) days following the end of the comment period, whether an environmental impact evaluation should be prepared for the proposed action. If the Office of Policy and Management determines that a finding of no significant impact is appropriate, the agency may proceed with implementation of the action. If the Office of Policy and Management determines that an environmental impact evaluation is appropriate, one shall be prepared, considered and reviewed in accordance with these regulations.

(Effective November 6, 1978)

Sec. 22a-1a-11. Public hearings

Public hearings held pursuant to the Act should be conducted, by the sponsoring agency, no sooner than thirty (30) days following the date of availability of an environmental impact evaluation. Public hearings held pursuant to other statutes on proposed actions shall be considered to fulfill the requirements of the Act provided:

(1) Notification of the hearing states the hearing is being held in accordance with the Act and;

(2) The environmental impact evaluation has been in public circulation for at least thirty (30) days prior to the date of the hearing.

The sponsoring agency shall consider all oral and written comments received at that public hearing in making a final decision on the proposed action.

(Effective November 6, 1978)

Sec. 22a-1a-12. Application of these regulations to federal/state actions

Environmental impact statements prepared for federal/state actions may be submitted in lieu of environmental impact evaluations required by these regulations, in order to avoid unnecessary duplication of effort. Such federally required environmental impact statements shall be circulated for review and comment in accordance with Section 22a-1a-8 of these regulations, and shall be considered by the Office of Policy and Management in accordance with Section 22a-1a-9 of these regulations.

(Effective November 6, 1978)

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Delegation of Authority

Sec. 22a-2a-1. Delegation of authority for the abatement of air pollution

(a) **Definitions**

''Designee'' means a Director of Health who has entered into a memorandum of agreement under this section.

''Director of Health'' means a local or district director of health appointed under the provisions of Sections 19a-200, 19a-201, or 19a-242 of the Connecticut General Statutes.

''District Department of Health'' means a district department of health established in accordance with section 19a-241 of the General Statutes.

''Investigation'' means observation, inquiry, the collection of samples for analysis and the recording of any pertinent facts relative to any existing or potential source of air pollution.

''Air pollution'' means the presence in the outdoor atmosphere of one or more air pollutants or any combination thereof in such quantities and of such characteristics and duration as to be, or be likely to be, injurious to public welfare, to the health of human, plant or animal life, or to property, or to reasonably interfere with the enjoyment of life and property.

(b) **Scope of delegation**

(1) The commissioner of Environmental Protection may by memorandum of agreement made pursuant to these regulations delegate the authority to investigate certain existing or potential air pollution discharges as described in Chapter 446c of the Connecticut General Statutes to any Director of Health. No authority to investigate any existing or potential source of pollution originating from a facility or property owned by the state or any instrumentality of the state shall be granted by these regulations.

(2) The commissioner may delegate to a Director of Health all or part of the authority to investigate violations of the standards, criteria and other requirements pertaining to visible emissions, fugitive dust, and odors contained in Sections 22a-174-11, 22a-174-18 (a), 22a-174-18 (b) and 22a-174-23 of the Regulations of Connecticut State Agencies.

(3) In carrying out delegated authority a designee shall be considered an agent of the commissioner and shall have the investigatory powers specified in Section 22a-174-4 (f) of the Regulations of Connecticut State Agencies.

(4) Within fifteen days of the detection of a suspected violation of any standard, criteria or other requirement which the designee has been authorized to investigate, the designee shall submit an investigative report to the commissioner and to the facility owner, describing the suspected violation and the methods by which it was detected. The report may also include recommended actions to be taken by the commissioner to abate the violation. Within thirty days of the receipt of such an investigative report the commissioner shall send written notice to the designee describing either the appropriate course of action to abate the violation or a statement of why no action is necessary. In the event that further investigation by the department is required, the commissioner shall so notify the designee and shall, at the completion of the investigation, inform the designee in writing of any necessary action.

(5) In addition to notifying the commissioner of the detection of a suspected violation as specified in subdivision (b) (4) the designee shall make reasonable effort in light of all circumstances to correct the suspected violation by discussion with the facility owner or operator.

(c) **Procedures for delegation**

(1) A Director of Health may request delegation of all or part of the authority within the scope of these regulations with the consent of the chief executive officer of the municipality or of the board of the district department of health by which the Director of Health is employed. The applicant shall submit a request for delegation of authority on forms provided by the commissioner. The request shall include the names of one or more staff members who will be considered as alternate designees in the event of the resignation or incapacitation of the Director of Health.

(2) In making a decision on an application, the commissioner shall consider all factors which the commissioner deems relevant, including but not limited to:

(A) the level of experience and training of the applicant and staff members;

(B) the nature of the duties to be delegated and the facilities subject to regulation in the area in question; and

(C) At least thirty days prior to granting or denying a request for delegation of authority, the commissioner shall publish once, in a newspaper having general circulation in the municipalities affected, notice of (1) The name and title of the person requesting such delegation (2) The municipality(s) affected by such a request and (3) The scope of the delegation requested. Such notice shall also be sent to the chief executive officers of any affected municipalities and to the Commissioner of Health Services. Based upon the response to such notice the commissioner may determine that it is in the best public interest to hold a public hearing prior to approving or denying the request for delegation. Notice of such hearing shall be published at least thirty days before the hearing in a newspaper having a substantial circulation in the municipality(s) affected.

(3) (A) The commissioner shall notify the applicant in writing of any decision on the application and shall state the reasons if an application is denied. If an application is approved the commissioner shall prepare a memorandum of agreement which defines the scope of the delegation. The commissioner and applicant shall both sign the memorandum of agreement. The memorandum of agreement must include the effective and expiration dates and may be valid for up to three years.

(B) Prior to the expiration of the memorandum of agreement, the commissioner shall review the designee's performance of delegated duties, including but not limited to recordkeeping, reporting and ability to exercise investigatory authority in a timely and efficient manner. If the commissioner is satisfied with the performance of the designee, the memorandum of agreement shall be renewed for a period not to exceed three years.

(4) An applicant or designee shall notify the commissioner of any changes in the information provided in the application within ten days of such change.

(5) If the designee leaves employment as Director of Health, the memorandum of agreement is automatically suspended, unless an alternate designee specified in Subdivision (c) (1) is available to fulfill the requirements of the memorandum of agreement until a new Director of Health is appointed. The replacement Director of Health, when one is appointed, shall apply for approval as the new designee. The replacement shall apply for such approval on a form provided by the commissioner. Upon approval of replacement, the commissioner shall alter the memorandum of agreement as necessary.

(6) The scope of delegation stated in a memorandum of agreement shall not be construed to encompass authority for any provision of Chapter 446c of the Connecticut General Statutes which is adopted after the effective date of such agreement. The commissioner and a designee may, with the written consent of the chief executive

officer of the municipality or of the board of the district department of health by which the designee is employed, amend a memorandum of agreement to include additional delegation of authority at any time.

(d) **Training and standards of conduct for designees**

(1) A designee may allow staff members to perform delegated duties, provided that the designee oversees and is ultimately responsible for the work.

(2) Each designee and all staff members who will perform delegated duties shall complete an initial training course, and, as the commissioner deems necessary, additional courses on air pollution control. Such courses may include, but not be limited to, the instruction in methods of administering and enforcing the laws, and technical training.

(3) Designees and members of their staffs who perform delegated duties shall abide by the standards of conduct for state employees contained in Chapter 10 of the Connecticut General Statutes, as amended.

(e) **Records and reporting**

(1) Each designee shall maintain orderly files which include but are not limited to the following:

(A) Records of complaints received regarding the categories of emissions covered by these regulations.

(B) Copies of all reports and results of any inspections made pursuant to these regulations.

(C) Copies if laboratory results of any samples collected during any investigation made pursuant to these regulations.

(D) Copies of any pertinent correspondence.

(2) During the month of September of each year, a designee shall submit a report to the commissioner summarizing the activities of the designee or staff members under the delegated authority for the previous twelve months. Such reports shall be on forms provided by the commissioner. At a minimum, the report must include the number of inspections conducted, and a summary of the problems encountered in investigations. The report may include recommendations for improvements in the regulation of air pollutants in this state.

(f) **Complaints regarding delegated agents**

The commissioner is empowered to receive and investigate complaints regarding the conduct of delegated agents, and the efficiency of delegated programs. If, in the commissioner's discretion, the consideration of suspension for cause or revocation of delegation as described in section (g) or (h) of these regulations is warranted, the commissioner shall hold a hearing prior to undertaking such action. At least thirty days prior to such hearing the commissioner shall provide a notice of such hearing to the delegated agent, to the chief executive officer of the municipality and to any person who has filed a complaint relevant to the inquiry. Following such hearing the commissioner shall decide to (1) continue the delegation agreement or (2) modify the delegation agreement, and shall provide notice of the decision to all parties in this matter. Such notice is the final decision of the commissioner.

(g) **Suspension of delegation**

The commissioner, may at the request of the designee or for cause, suspend all or part of any delegation agreement concluded pursuant to these regulations for such periods as the commissioner deems necessary to achieve effective management of the delegated authority.

(h) **Revocation of delegation**

The commissioner may revoke all or part of a delegation of authority upon written notice to the designee and the chief executive officer of the municipality or the

board of the district department of health by which the designee is employed. Revocation is effective upon receipt of such notice by both persons.

(i) **Termination by designee**

A designee may relinquish all or part of the delegated responsibilities upon thirty days written notice to the commissioner and the chief executive officer of the municipality or the board of the district department of health by which the designee is employed.

(j) **Program review**

The commissioner shall maintain a record of the cost to the Department of Environmental Protection of administering the regulations for administering the delegation program under this section. Three years from the effective date of this section, the commissioner shall assess the benefits, including any cost reductions, and liabilities to the Department of the delegation program, including but not limited to the costs specified above, the number of inspections conducted by designees, and the overall effectiveness of delegation in reducing air pollution in the state.

(Effective December 26, 1985)

Sec. 22a-2a-2. Delegation of authority for the abatement of water pollution

(a) **Definitions**

For purposes of this section:

''Blowdown from Heating and Cooling Equipment'' means wastewaters generated by heating and cooling equipment that recycles water.

''Building Floor Drain Wastewaters'' means wastewaters generated from periodic washdown of floors.

''Commercial laundry wastewaters'' means wastewaters generated by laundromats and commercial laundries.

''Cooling Water (Non-Contact)'' means wastewater which has been used for cooling purposes which does not come into direct contact with a product or process.

''Designee'' means a Director of Health who has entered into a memorandum of agreement under this section.

''Director of Health'' means a local or district director of health appointed under the provisions of sections 19a-200, 19a-201a, or 19a-242 of the General Statutes.

''District Department of Health'' means a district department of health established in accordance with section 19a-241 of the General Statutes.

''Domestic Sewage'' means sewage that consists of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surface or yard drains.

''Investigation'' means observation, inquiry, the collection of samples for analysis or the recording of any pertinent facts relative to any existing or potential source of pollution of the waters of the state which may or may not be operating under a permit issued by the commissioner.

''Stormwater'' means wastewater consisting of precipitation runoff generated by residential, commercial, or industrial land use.

''Swimming Pool Backwash'' means wastewaters generated from the backwashing of swimming pool filters.

''Water Production Wastewater'' means wastewater generated by the treatment of raw water for potable, industrial process, or commercial process use.

(b) **Scope of delegation**

(1) The commissioner may by memorandum of agreement made pursuant to these regulations delegate all or part of the authority to investigate all points of existing or potential waste discharges as provided for in Section 22a-416 of the General Statutes to any Director of Health. Delegation of such authority shall be limited to the following categories of waste material sources: (1) Sewerage systems for the treatment of domestic sewage which are owned by a person as defined in section 22a-423 of the General Statutes (2) Agriculture as defined in section 1-1q of the General Statutes. (3) Blowdown from heating and cooling equipment, building floor drains, commercial laundry wastewater, cooling water (non-contact), stormwater, swimming pool backwash, and water production wastewater. No authority to investigate any existing or potential source of pollution originating from a facility or property owned by the state or any instrumentality of the state shall be granted by these regulations.

(2) Within fifteen days of the detection of a suspected violation originating from a source that the designee has been authorized to investigate he or she shall submit a report to the commissioner describing the violation and recommending actions which the commissioner should take to abate the existing or potential pollution, as provided for in Chapter 446k of the General Statutes. The designee shall provide the facility owner with a copy of any investigation report and recommendation, and shall discuss any suspected violation with the facility operator in an effort to gain voluntary compliance. Within thirty days of the receipt of such an investigative report the commissioner shall send written notice to the designee describing the course of action which he or she deems appropriate to abate the actual or potential source of pollution or stating why no action is necessary. In the event that further investigation by the department is required, the commissioner shall so notify the designee and shall, at the completion of the investigation, inform the designee in writing of his or her intended action.

(3) For the purposes set forth in these regulations, any designee shall be considered an agent of the commissioner.

(c) **Procedures for delegation**

(1) A Director of Health may request delegation of all or part of the authority within the scope of these regulations with the consent of the chief executive officer of the municipality or of the board of the district department of health by which he or she is employed. Application for delegation of authority shall be submitted on forms provided by the commissioner and shall include but need not be limited to the following:

(A) the name of the applicant and his or her address and phone number during normal business hours and in the event of an emergency;

(B) the date of appointment of the applicant in accordance with sections 19a-200, 19a-201, or 19a-242 of the General Statutes;

(C) the experience and training of the applicant which is related to the categories or investigation covered by this regulation;

(D) the name of each staff member who will be available to perform delegated duties and the estimated percentage of time that he or she will be able to spend on those duties;

(E) a summary of the experience and training of each staff member specified in response to (D) above, including date of appointment;

(F) the names of one or more staff members who will be considered as alternate designees in the case of the resignation or incapacitation of the Director of Health;

(G) a statement that the applicant agrees that he or she and all staff members who will be performing delegated duties will complete the training required by subsection (d) of this section;

(H) any additional information which the commissioner deems necessary; and

(I) the signature of the applicant and chief executive officer of the municipality or the authorized signature of the board of the district department of health by which he or she is employed.

(2) In making a decision on an application, the commissioner shall consider all factors which he or she deem relevant, including but not limited to:

(A) the level of experience and training of the applicant and his or her staff; and

(B) the nature of the duties to be delegated and the facilities subject to regulation in the municipality or district in question.

(C) At least thirty days prior to granting or denying a request for delegation of authority, the commissioner shall publish once, in a newspaper having general circulation in the municipalities affected, notice of (1) The name and title of the person requesting such delegation (2) The municipality(s) affected by such a request and (3) The scope of the delegation requested. Such notice shall also be sent to the Commissioner of Health Services. Based upon the response to such notice the commissioner may determine that it is in the best public interest to hold a public hearing prior to approving or denying the request for delegation. Notice of such hearing shall be published at least thirty days before the hearing in a newspaper having a substantial circulation in the municipality(s) affected.

(3) (A) The commissioner shall notify the applicant in writing of the decision on the application and if the application is denied, shall state the reasons for the denial. If the commissioner approves the application, he or she shall prepare a memorandum of agreement which shall define the scope of the delegation. The memorandum of agreement shall be effective as stated therein or when signed by the commissioner and the designee, whichever is later, and shall automatically expire as stated therein but no more than three years from the effective date, unless renewed by both parties.

(B) Prior to the expiration on the memorandum of agreement, the commissioner shall review the Director of Health's performance of delegated duties, including but not limited to record keeping, reporting and ability to exercise investigation authority in a timely and efficient manner. If the commissioner is satisfied with the performance of the Director of Health, he or she shall renew the memorandum of agreement for a period not to exceed three years.

(4) An applicant or designee shall notify the commissioner of any changes in the information provided in accordance with subdivision (c) (1) of this section within ten days of such change.

(5) If the designee leaves his or her employment as Director of Health, the memorandum of agreement shall automatically be suspended, unless an alternate designee as provided for in subparagraph (c) (1) (F) of these regulations is available to fulfill the requirements of the memorandum of agreement until a new Director of Health is appointed. The replacement Director of Health, when one is appointed, shall apply for such approval on a form provided by the commissioner and shall include, at a minimum, the information specified in subparagraphs (c) (1) (A) through (C), and (c) (1) (F), (G) and (H) of this section. Upon approval of the replacement, the commissioner may alter the memorandum of agreement as he or she deems necessary. The memorandum of agreement shall be effective as stated therein or when signed by the commissioner and the designee, whichever is later, and shall

automatically expire as stated therein but no more than three years from the effective date, unless renewed by both parties.

(6) The scope of delegation stated in a memorandum of agreement shall not be construed to encompass authority for any provision of Chapter 446k which is adopted after the effective date of such agreement. The commissioner and a designee may, with the written consent of the chief executive officer of the municipality or of the board of the district department of health by which he or she is employed, amend a memorandum of agreement to include additional delegation of authority at any time.

(d) **Training and standards of conduct for designees**

(1) A designee may allow his or her staff to perform delegated duties, provided that the designee oversees and is ultimately responsible for the work of staff members.

(2) Each designee and all members of his or her staff who will perform delegated duties shall complete an initial training course and as the commissioner deems necessary, additional courses on wastewater and wastewater management consistent with the delegation agreement. Such courses may include but not be limited to instruction in methods of administering and enforcing the water pollution control laws, and technical training.

(3) Designees and members of their staffs who perform delegated duties shall abide by the standards of conduct for state employees contained in Chapter 10 of the General Statutes, as amended.

(e) **Records and reporting**

(1) Each designee shall maintain orderly files at his or her central office which shall include but not be limited to the following:

(A) Records of complaints received regarding the categories of discharges covered by these regulations.

(B) Copies of all reports and results of any inspections made pursuant to these regulations.

(C) Copies of laboratory results of any samples of waste or water collected during any investigation made pursuant to these regulations.

(D) Copies of any pertinent correspondence.

(2) During the month of September of each year, a designee shall submit a report to the commissioner summarizing the activities of the designee and his or her staff under the delegated authority. The report shall be on a form provided by the commissioner and shall include but not be limited to the number of inspections conducted, and a summary of the problems encountered in investigations. The report may include recommendations for improvements in the regulation of the types of wastewater covered by the delegation agreement.

(f) **Complaints regarding delegated agents**

The commissioner is empowered to receive and investigate complaints regarding the conduct of delegated agents, and the efficiency of delegated programs. If, in the commissioner's discretion, the consideration of suspension for cause or revocation of delegation as described in subsection (g) or (h) of these regulations is warranted, the commissioner shall hold a hearing prior to undertaking such action. At least thirty days prior to such hearing the commissioner shall provide a notice of such hearing to the delegated agent, to the chief executive officer of the municipality and to any person who has filed a complaint relevant to the inquiry. Following such hearing the commissioner shall decide to (1) continue the delegation agreement, (2) modify the delegation agreement, (3) suspend the delegation agreement or (4) revoke the delegation agreement, and shall provide notice of the decision to all parties in this matter. Such notice is the final decision of the commissioner.

(g) **Suspension of delegation**

The commissioner may at the request of the designee or for cause suspend all or part of any delegation agreement concluded pursuant to these regulations for such periods as he or she deems necessary to achieve effective management of the delegated authority.

(h) **Revocation of delegation**

The commissioner may revoke all or part of a delegation of authority upon written notice to the Director of Health and the chief executive officer of the municipality or the board of the district department of health by which he or she is employed. Revocation shall be effective upon receipt of such notice by both parties.

(i) **Termination by designee**

A designee may relinquish all or part of his or her delegated responsibilities upon thirty days written notice to the commissioner and the chief executive officer of the municipality or the board of the district department of health by which he or she is employed.

(j) **Program review**

The commissioner shall maintain a record of the cost to the Department of Environmental Protection for administering the delegation program under this section. Three years from the effective date of this section, the commissioner shall assess the benefits including any cost reductions and liabilities to the Department of the delegation program, including but not limited to the costs specified above, the number of inspections conducted by designees, and the overall effectiveness of inspections conducted by designees, and the overall effectiveness of delegation in reducing pollution of the waters of the state.

(Effective December 26, 1985)

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Sec. 22a-3a-1.

Repealed, June 19, 1992.

Sec. 22a-3a-2. General

(a) **Definitions**

(1) As used in these Rules of Practice:

''Applicant'' means a person who files an application with the Department.

''Application'' means a request for a Department license or renewal thereof, for a modification of a Department license if the modification is sought by the licensee, for certification under Section 401 of the Clean Water Act, 33 U.S.C. Section 1341, or for a variance.

''Commissioner'' means the Commissioner of Environmental Protection or his agent.

''Day'' means calendar day.

''Department'' means the Department of Environmental Protection.

''Office of Adjudications'' means the Department's Office of Adjudications.

''Order'' means, unless otherwise indicated by the context, all or part of a Department order to enforce a statute, regulation or license, or of a notice to revoke, suspend, or modify a license, or of a notice under section 22a-6b of the General Statutes, or of a notice under section 22a-52 of the General Statutes, or any other Department action with respect to which there is an opportunity for hearing under the terms of an applicable statute or regulation. An order does not include a ruling as defined in this subsection.

''Petition'' means a request for the Department to issue a declaratory ruling or to adopt, amend or repeal a regulation.

''Pleading'' means a paper filed in a contested case other than an application, petition or document offered into evidence.

''Proceeding'' means, unless otherwise indicated by the context, a licensing, a contested case, a regulation-making, a proceeding on a petition for a declaratory ruling, or any other matter which is a proceeding under law.

''Respondent'' means a person to whom a Department order is issued.

''Ruling'' means a decision or directive of the hearing officer, Director of Adjudications, or the Commissioner, other than a proposed final decision or final decision.

''Staff'' means those employees acting in their official capacity or that bureau, division, unit, or section of the Department participating in a contested case.

(2) As used in these Rules of Practice, the following terms shall be defined as they are defined in section 4-166 of the General Statutes: contested case, final decision, hearing officer, intervenor, license, licensing, party, person, proposed final decision, proposed regulation, regulation, and regulation-making.

(b) **Applicability, purpose, and construction**

(1) These Rules of Practice govern practice in all Department proceedings unless otherwise provided by law, except that other procedural regulations of the Department which are more stringent than these Rules of Practice shall take precedence, and other procedural regulations of the Department which impose requirements in addition to those imposed by these Rules of Practice shall also apply. The purpose of these Rules of Practice is to secure the just and expeditious determination of proceedings, and they shall be interpreted liberally so as to further the purposes and policies of the statutes and regulations administered by the Commissioner.

(2) As used in this section, words in the singular include the plural, and words in the feminine include the masculine or neuter, and vice versa, as the case may be.

(3) These Rules of Practice shall apply on and after their effective date to every Department proceeding, whether such proceeding commenced before or after such effective date, except where application to a proceeding that commenced before such effective date would unavoidably result in unfairness to the Staff or any party or intervenor or would prejudice the public health, safety, or welfare or the environment.

(4) Notwithstanding any action of an agent of the Commissioner, the Commissioner shall retain authority to act under these Rules of Practice, including the authority to take any action a hearing officer may take. Any action of the Commissioner shall preempt the action of the hearing officer or other agent.

(5) Nothing in these Rules of Practice shall limit the Commissioner's authority under any statute or other regulation.

(c) **Commencement and termination of proceedings**

(1) A proceeding commences when (A) an application or petition is received by the Department, (B) the Commissioner issues notice under subdivision 22a-3a-4 (a) (5) of these Rules of Practice that he has on his own initiative initiated a declaratory ruling proceeding, (C) the Commissioner issues a notice under section 4-168 (a) of the General Statutes concerning a regulation-making which he has initiated on his own initiative, (D) the Commissioner issues an order, or (E) a proceeding commences under law.

(2) A proceeding terminates when (A) the Commissioner issues a final decision in a contested case, other than a decision remanding the matter to the hearing officer for further proceedings, provided that if a timely request for reconsideration under subdivision 22a-3a-6 (a) (1) of these Rules of Practice is made, the proceeding terminates when the Commissioner denies the request or issues a decision made after reconsideration, (B) the Commissioner issues a declaratory ruling pursuant to section 4-176 of the General Statutes, (C) the Commissioner decides not to issue a declaratory ruling pursuant to subsection (i) or to subdivision (4) or (5) of subsection (e) of section 4-176 of the General Statutes, (D) the Commissioner completes the adoption, amendment or repeal of a regulation pursuant to sections 4-168 through 4-172 of the General Statutes, (E) the Commissioner revokes an order, (F) the Commissioner rejects an application for insufficiency pursuant to subsection (e) of this section or any other provision of law, (G) the applicant or petitioner withdraws his application or petition, (H) the respondent withdraws his answer or request for hearing filed pursuant to subsection 22a-3a-6 (i) of these Rules of Practice, (I) the Commissioner disposes of a license application, unless an opportunity for hearing is provided with respect to such disposition, (J) the lawful time for filing an answer or request for hearing pursuant to subsection 22a-3a-6 (i) of these Rules of Practice has run without the filing of such answer or request, or (K) the Commissioner otherwise determines that the proceeding has terminated.

(d) **Computation of time**

In computing any period of time prescribed or allowed by these Rules of Practice or by an order, ruling, final decision, regulation, permit, approval, or other action of the Commissioner, the day of the act, event or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, a Sunday, or a Connecticut or federal holiday, in which case such period runs until the end of the next day which is not a Saturday, a Sunday, or a Connecticut or federal holiday.

(e) **Insufficient applications and petitions**

The Commissioner may reject an application or petition as insufficient if it does not meet the requirements of Section 22a-3a-4 (a) or 22a-3a-5 (a), respectively, of these Rules of Practice, or does not meet the requirements of any other applicable provision of law governing the form, contents, and filing of such application or petition, or is so manifestly insufficient as to make further processing impossible. Except as otherwise provided by law or in subsection 22a-3a-5 (c) of these Rules of Practice, a rejection under this subsection shall stop the running of any time period which by law begins to run when the Department receives an application or petition; any such period shall begin anew when the Department receives an amended application or petition. Nothing shall preclude the Commissioner from requiring additional information from an applicant or petitioner if the application or petition is not rejected under this subsection or is deemed sufficient.

(f) **Smoking**

Any person who, in violation of section 1-21b of the General Statutes, lights or carries a lighted cigarette, cigar, pipe, or similar device in any room in which a Department hearing is taking place will be excluded from the hearing room.

(g) **Media**

Any proceedings under these Rules of Practice which are open to the public may be recorded, photographed, broadcasted, or recorded for broadcast in accordance with the provisions of subsection (a) of section 1-21a of the General Statutes, provided the proceedings are not so disturbed as to impair any person's ability to hear or be heard or to present evidence or argument. In order to minimize disruption of the proceedings, the hearing officer or Commissioner may impose reasonable limits on any person engaged in recording, photographing, broadcasting, or recording for broadcast.

(h) **Attendance**

Any person who attends a hearing in connection with any proceeding but is not a party or a witness for a party and who does not intend to speak pursuant to subdivision 22a-3a-3 (e) (2) or 22a-3a-6 (t) of these Rules of Practice shall not be required to give his name or any other information or to satisfy any condition precedent to his attending the hearing.

(i) **Public access to documents**

(1) Upon receipt of a request for public records under chapter 3 of the General Statutes, the Department will answer within the time allowed by law, provided that such answer may request further information, as appropriate, or indicate that a search for responsive documents is underway. The Department will complete a search for responsive documents as promptly as practicable, taking into consideration the Department's other obligations, the need to review records before release to determine whether they contain statutorily protected material, and the requester's circumstances. If the Department deems it appropriate, the Department may ask a person who has made a request to inspect documents under section 1-19 of the General Statutes to make an appointment for the inspection.

(2) An inspection of records in the Office of Adjudications shall be conducted in a manner that does not disrupt the conduct of a hearing.

(j) **Recording of hearings**

Hearings in all proceedings shall be recorded either stenographically or electronically. The recording of a hearing or any part thereof shall be transcribed by or through the Office of Adjudications (1) on request of any person, provided such person shall pay the cost of transcription and recording, or (2) in accordance with

section 22a-6d of the General Statutes. Subject to the reasonable control of the hearing officer, the Staff, a party, or an intervenor may record any portion of a proceeding in which the hearing officer participates. Settlement discussions conducted by a referee under section 22a-3a-6 (j) do not constitute proceedings under these Rules of Practice and shall not be recorded unless all of the participants in such discussions consent to recording.

(k) **Suspension and reconvening of hearings**

Except as provided in subdivision (j) (2) and subparagraph (y) (3) (B) of section 22a-3a-6 of these Rules of Practice, the hearing officer or the Commissioner, as appropriate, may continue a hearing to another time and place.

(*l*) **Investigative hearings**

(1) The Commissioner may hold investigative hearings for the purpose of (A) investigating actual or potential noncompliance with any statute, regulation, license or order administered or issued by her, or (B) receiving information concerning any matter which reasonably may be the subject of regulation by the Department. The Commissioner shall provide reasonable notice of an investigative hearing.

(2) An investigative hearing shall be open to the public, and the provisions of subsections (d), (f), (g), (h), (i), (j), (k), (*l*), and (n) of this section shall apply. The hearing officer shall have the power to exclude evidence which is irrelevant, immaterial, or unduly repetitious, administer oaths in the manner specified in subsection 22a-3a-6 (r) of these Rules of Practice, take testimony, and subpoena witnesses and evidence. After an investigative hearing, the hearing officer shall prepare findings of fact, conclusions of law, or both, if the Commissioner so directs.

(m) **Voluntary termination of proceedings**

The Commissioner may revoke an order at any time before a final decision is issued, provided that he shall give notice to the staff, parties, and intervenors of his intent to revoke. Objections to revocation may be filed with the Commissioner within seven days of such notice. A respondent to an order may withdraw the answer or request for hearing at any time, an applicant may withdraw an application or a request for hearing at any time, and a petitioner for a declaratory ruling or a regulation-making may withdraw the petition at any time. Nothing herein shall preclude the Commissioner from revoking an order after a proceeding has terminated.

(n) **Disruption of hearings**

If any person disrupts a hearing or otherwise interferes with the orderly conduct of a hearing, the hearing officer may order such person to leave the hearing or may suspend the hearing and reconvene it at an appropriate place and time.

(o) **Filing of documents**

Except as provided in Section 22a-3a-6 (b) (7) of these rules, any document required or allowed to be filed with the commissioner by any statute, regulation, license, or order, including without limitation a petition for declaratory ruling and a petition for hearing under Section 22a-208a (e) of the General Statutes, shall be deemed filed on the date such document is received by the Commissioner.

(p) **Electronic filing**

Except as provided in *§* 22a-3a-6 (b) (8) of these Rules of Practice, no document submitted to the Department pursuant to an order, and no petition or application, may be electronically filed without the Commissioner's consent.

(Effective June 19, 1992)

Sec. 22a-3a-3. Regulation-making

(a) **Advance notice of regulation-making**

Any person may request that the Department provide advance notice by mail of regulation-making proceedings. A request for advance notice shall be for either (1)

all regulation-makings initiated by the Department or (2) all regulation-makings initiated by a particular Bureau of the Department. The fee for provision of advance notice of all Department regulation-makings shall be $50.00 per person per calendar year or part thereof, and the fee for provision of advance notice of all regulation-makings of a particular Bureau shall be $25.00 per person per calendar year or part thereof. A request for advance notice shall be accompanied by a check or money order for such amount payable to the Department of Environmental Protection, provided that the fee shall be waived when (1) the person making the request is an indigent individual or (2) in the Commissioner's judgment, the request is in the public interest because it is likely to contribute significantly to public understanding of the operations and activities of the Department and is not primarily in the commercial interest of the requester. A request for advance notice shall be made in writing and directed to the Director of Education and Publications in the Department's Bureau of Environmental Services. A request for advance notice shall be effective only for the calendar year in which it is made and shall expire on December 31.

(b) **Regulation-making record**

The regulation-making record shall contain, though it need not be limited to, the items referred to in section 4-168b of the General Statutes.

(c) **Petitions for regulation-making**

Any person may, pursuant to section 4-174 of the General Statutes, petition the Commissioner in writing to adopt, amend, or repeal a regulation. The petition shall set forth the text of a proposed regulation or amendment and shall state with particularity the reasons for the petition. The petition shall be signed by the petitioner or by his attorney or other representative, if any, and shall contain the address and telephone number of the petitioner and of his attorney or other representative, if any. The petition shall be directed to the Commissioner and shall be delivered personally or by mail.

(d) **Procedures for regulation-making**

(1) Notice of intent to adopt, amend, or repeal a regulation shall be provided in accordance with sections 4-168 and 22a-6 of the General Statutes and any other applicable law. The Commissioner may provide any additional notice which he deems appropriate.

(2) If a hearing is held in a regulation-making, the hearing officer shall conduct the hearing so as to afford any interested person a reasonable opportunity to present oral or written comments. Any person who presents oral comments shall provide his name and address to the hearing officer. The hearing officer may exclude irrelevant and unduly repetitious comments, and may limit oral comments to a reasonable time period so that all those present may be heard. The hearing officer may question or request further information from any commenter.

(3) Whether or not a hearing is held, any person may file written comments on a proposed regulation. Written comments shall be filed within the time allowed in the notice published pursuant to subdivision (1) of this subsection or such additional time as may be allowed by the hearing officer. Written comments shall include the name, address, and telephone number of the commenter and his attorney or other representative, if any.

(4) Any person who does not comment orally or in writing but who wishes to receive notice pursuant to section 4-168 (d) of the General Statutes of the Department's action on the proposed regulation may file a written request for such notice with the hearing officer, including in the request his name and address.

(5) Following the submission of any timely oral and written comments, the Department shall prepare (A) the final wording of the proposed regulation, (B) a statement of the principal reasons in support of the Department's intended action, (C) a statement of the principal considerations raised in opposition to the Department's intended action in written and oral comments and the reasons for rejecting such considerations, and (D) a revised fiscal note, as necessary.

(6) The Department shall give notice as required by subsection (d) of section 4-168 of the General Statutes and proceed in accordance with sections 4-169 through 4-173 of the General Statutes.

(Effective June 19, 1992)

Sec. 22a-3a-4. Declaratory rulings

(a) **Initiation of declaratory ruling proceedings**

(1) Any person may petition the Commissioner in writing to issue a declaratory ruling as provided by section 4-176 of the General Statutes. The petition shall identify clearly and with particularity the facts and circumstances which give rise to the petition; any statute, regulation, or final decision of the Department at issue and the particular aspect of it to which the petition is addressed; and the question or questions as to which the declaratory ruling is sought.

(2) A petition for declaratory ruling shall be signed by the petitioner or by his attorney or other representative, if any, and shall contain the address and telephone number of the petitioner and of his attorney or other representative, if any. The petition shall be directed to the Commissioner and shall be delivered personally or by mail.

(3) Any petition for declaratory ruling filed with the Commissioner shall be accompanied by an affidavit that the petitioner has given notice of the substance of the petition, and of the opportunity to file comments and to request intervenor or party status under subdivision (c) (1) of this section, to all persons known by the petitioner to have an interest in the subject matter of the petition. Unless the Commissioner has provided for another method reasonably calculated to apprise interested persons of the petition, such notice shall be delivered to each such person personally or by mail, except that if there are more than fifty such persons, the petitioner may instead publish such notice in a newspaper of general circulation in the area where each such person resides or his principal place of business is located. The petitioner's affidavit shall contain the name and address of each person to whom the notice was personally delivered or mailed, the date of personal delivery or mailing, and, if applicable, the name of the newspaper(s) in which such notice was published, the date of publication, and the reasons why newspaper notice was published.

(4) Within thirty days after he receives a petition for declaratory ruling filed in accordance with subdivisions (1), (2), and (3) of this section, the Commissioner shall mail notice thereof to (A) any person who has requested notice under subsection (b) of this section, (B) any person who has been given status in the declaratory ruling proceeding as a party or an intervenor pursuant to subdivision (c) (1) of this section, and (C) any person to whom notice is required by any provision of law.

(5) The Commissioner may on his own initiative commence a proceeding for the issuance of a declaratory ruling as provided by section 4-176 of the General Statutes. At least sixty days before a hearing is held in such proceeding or, if no hearing is held, at least sixty days before he issues the declaratory ruling, the Commissioner shall mail notice of the proceeding to (A) all persons who have

requested notice under subsection (b) of this section and (B) all persons known to have an interest in the subject matter of the declaratory ruling proceeding, except that if there are more than fifty such persons, the Commissioner may instead publish such notice in a newspaper of general circulation in the area where each such person resides or has his principal place of business. Such notice, whether mailed or published, shall provide information about the opportunity to file comments and to request intervenor or party status under subdivision (c) (1) of this section.

(b) **Requests for notice of declaratory rulings**

Any person may request that the Department provide notice of the filing of declaratory ruling petitions, or the commencement by the Commissioner on his own initiative of declaratory ruling proceedings, on a particular subject matter or matters. A request for such notice shall be made in writing and directed to the Director of Education and Publications in the Department's Bureau of Environmental Services, and shall contain a specific statement of the subject matter(s) with which the requester is concerned. A request under this subsection shall be effective only for the calendar year in which it is made and shall expire on December 31.

(c) **Proceedings on declaratory rulings**

(1) Following the receipt of a petition for declaratory ruling filed in accordance with subdivisions (1), (2), and (3) of subsection (a) of this section or the issuance of notice under subdivision (5) of such subsection that the Commissioner on his own initiative has commenced a declaratory ruling proceeding, any person may file a request to become a party or intervenor. Such a request, and disposition thereof, shall be governed by the provisions of subsection (k) of section 22a-3a-6 of these Rules of Practice.

(2) Whether or not a hearing is held in a proceeding for a declaratory ruling, any person may file written comments in connection with such proceeding. Comments shall be directed to the Commissioner, shall be signed by the commenter or by his attorney or other representative, if any, and shall contain the name and telephone number of the commenter and his attorney or other representative, if any. Unless the Commissioner provides otherwise, comments shall be filed within thirty days after receipt of mailed notice or publication of newspaper notice, under subdivision (a) (3), (4), or (5) of this subsection. Comments shall be delivered personally or by mail.

(3) Within sixty days after receipt of a petition for declaratory ruling filed in accordance with subdivisions (a) (1), (2), and (3) of this section or the issuance of notice under subdivision (a) (5) of this section that the Commissioner on his own initiative has commenced a proceeding for a declaratory ruling, the Commissioner shall take action in accordance with subsection (e) of section 4-176 of the General Statutes. The Commissioner's decision under such subsection, and any declaratory ruling subsequently issued, shall be sent by certified mail, return receipt requested, to (A) any person granted status as a party or intervenor under subdivision (1) of this subsection; (B) any person who filed comments under subdivision (2) of this subsection; and (C) the petitioner, if applicable.

(4) The Commissioner may direct that a hearing be held in a declaratory ruling proceeding when a fact or facts must be determined to make the declaratory ruling or when in his judgment a hearing is otherwise appropriate. A hearing in a declaratory ruling proceeding shall be governed by section 22a-3a-6 of these Rules of Practice.

(Effective June 19, 1992)

Sec. 22a-3a-5. Licenses

(a) **Form and filing of applications**

(1) Any application for a license shall be in such form as may be prescribed by the Commissioner and shall be in writing. In addition to any other information required by an application form or applicable statute or regulation, an application shall indicate: (A) the name, address and telephone number of the applicant and of his attorney or other representative, if any, (B) the license or licenses sought, (C) the statutes and regulations applicable to the application, (D) the applicant's proposal and the facilities, activities, and sites which are the subject of or are affected by the application, (E) any other information which the Commissioner may require for the purpose of reviewing the application in accordance with applicable statutory and regulatory criteria, (F) any additional information which the applicant considers relevant, and (G) an executive summary. The executive summary shall clearly and concisely summarize the information contained in the application.

(2) An application, including any attachments thereto, shall be certified by the applicant and by the individual or individuals responsible for actually preparing the application, each of whom shall state in writing: ''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157 of the General Statutes, and in accordance with any other applicable statute.'' The application and such copies thereof as the Commissioner may require shall be delivered personally or by mail and, unless the Commissioner requires differently, shall be directed to the Department Bureau which administers the program pertinent to the application.

(b) **Hearings on applications**

(1) A request under a statute or regulation for a hearing following the disposition of an application, and all actions in the proceeding subsequent to the filing of such request, shall be governed by Section 22a-3a-6 of these Rules of Practice. In an application proceeding in which a hearing is held because a statute or regulation requires a hearing or because the Department schedules a hearing on its own initiative, all actions in the proceeding subsequent to the scheduling of such hearing shall be governed by such section.

(2) Any public notice of hearing on an application issued by the Department shall indicate the place and times at which a copy of the application is available for public inspection.

(c) **License renewals**

(1) An application for renewal of a license shall be filed no later than 120 days before the expiration of the existing license, unless an earlier filing is required or a later filing allowed by an applicable statute or regulation. An application for a license renewal shall be made in accordance with the provisions of subsection (a) of this section, except that the applicant may, unless otherwise provided by law, include in the application a copy of material from his most recently approved application concerning the same subject matter.

(2) If an application for license renewal is untimely filed, the existing license shall expire on the expiration date established therein or, if no expiration date

is established therein, on the expiration date established by an applicable statute or regulation.

(3) (A) An application for license renewal is insufficient if it does not comply with the requirements of subsection (a) of this section and the requirements of any other applicable provisions of law governing the form, contents, and filing of such application, or is so manifestly insufficient as to make further processing impossible. If an application for license renewal is timely but insufficient, the Commissioner shall send notice to the applicant describing the way in which the application is insufficient. If the applicant does not submit a sufficient application within thirty days of the mailing of such notice of insufficiency or within such other time as the Commissioner deems appropriate and specifies in writing, the existing license shall expire on the expiration date established therein or, if no expiration date is established therein, on the expiration date established by an applicable statute or regulation. If the applicant submits a sufficient application within thirty days of the mailing of the Commissioner's notice of insufficiency, or within the time specified by the Commissioner, the existing license shall continue in effect in accordance with section 4-182 (b) of the General Statutes.

(B) Notwithstanding the provisions of subparagraph (A) of this subdivision, if an application for license renewal is timely but insufficient, and the Commissioner does not send notice of insufficiency until after thirty days before the expiration date of the existing license, and the Commissioner's finds, in his sole discretion and in writing, that the applicant made best efforts to submit a sufficient application and did not contribute to any delay in the Commissioner's ability to process the application, the existing license shall continue in effect in accordance with section 4-182 (b) of the General Statutes; except that if such applicant fails to submit a sufficient application within thirty days of the mailing of the Commissioner's notice of insufficiency, the existing license shall expire on the thirty-first (31st) day after the mailing of such notice.

(d) **Delicensing proceedings**

(1) Unless otherwise provided by law, any Department proceeding to revoke, suspend or modify a license shall commence with issuance of notice to the licensee. Such notice shall be delivered personally or by certified mail, return receipt requested, and shall describe the basis for the revocation, suspension or modification and inform the licensee that he may within thirty days of issuance of the notice file a request for hearing. A request for hearing under this subdivision shall conform with the provisions of subsection 22a-3a-6 (i) of these Rules of Practice. Department delicensing proceedings shall be governed by section 22a-3a-6 of these Rules of Practice.

(2) In addition to any other reason provided by statute or regulation, the Commissioner may revoke, suspend, or modify a license for any of the following reasons:

(A) The licensee has violated a statute, regulation, water quality standard, license or order administered or issued by the Commissioner, or has committed any other violation of law relevant to the licensed activity.

(B) The licensee or a person on his behalf failed to disclose all relevant and material facts in the application for the license or during any Department proceeding associated with the application;

(C) The licensee or a person on his behalf misrepresented a relevant and material fact at any time, including, without limitation, in the application for the license or in a report or laboratory analysis submitted to the Department;

(D) The licensee failed to comply with a reasonable request by the Commissioner for any information related to the license, activity, or facility which is the subject

of the license, or to the licensee's compliance with the license or any statute, regulation, water quality standard, or order administered or issued by the Commissioner.

(E) The activity authorized by the license is causing or is reasonably likely to cause air or water pollution or to endanger human health, safety, or welfare or the environment; or

(F) A change in pertinent law or technology.

(e) **Clerical errors in licenses**

At any time after the issuance of a license, the Commissioner may correct such license for clerical errors.

(Effective June 19, 1992)

Sec. 22a-3a-6. Contested cases

Part A—General

(a) **Scope and applicability**

This section governs proceedings in all contested cases. Except as otherwise provided in these Rules of Practice, all rights, obligations and privileges of a party under this part apply equally to the Staff, and the term ''party'' shall be deemed to include the Staff.

(b) **Filing, service, and form of pleadings**

(1) Except as otherwise provided in these Rules of Practice, the original of any pleading which is required or allowed to be filed under this section shall be filed in the Office of Adjudications.

(2) The first page of every pleading shall contain a caption identifying the respondent, applicant, or declaratory ruling petitioner and the number of the order, application, or declaratory ruling petition which is the subject of the proceeding.

(3) Every pleading shall be signed by the person filing or by his attorney or other representative, if any. The signature constitutes a representation by the signer that he has read the pleading, that to the best of his knowledge, information and belief the statements made therein are true and complete, and that the pleading is not filed for the purpose of delay or harassment.

(4) The initial pleading filed by any person shall contain the name, address and telephone number of the person filing and of his attorney or other representative, if any. Any change in this information shall, within seven days after such person becomes aware of such change, be communicated in writing to the Office of Adjudications and to all persons upon whom pleadings shall be served under subdivision (5) of this subsection.

(5) A copy of every pleading shall be served personally or by mail upon all parties and intervenors and upon any person who, to the knowledge of the pleader, has filed a request for status as a party or intervenor but whose request has not yet been disposed of Every pleading filed shall be accompanied by a certification in substantially the following form:

> I (*name*) hereby certify that a copy hereof was (*personally delivered*) (*mailed in a properly addressed, first-class postage pre-paid envelope*) on (*date*) to the following persons at the following addresses:
>
> _____
>
> _____
>
> _____
>
> _____
>
> (*signature of person making service*)

(6) Service of pleadings shall be complete upon personal delivery or mailing. When a pleading is served by mail, three days shall be added to any time allowed for the filing of a responsive pleading.

(7) The date of filing of any pleading required or allowed under this section shall be the date such pleading is received in the Office of Adjudications.

(8) No pleading shall be filed electronically without the consent of the hearing officer and the other parties and intervenors, and no pleading shall be served electronically on any party or other person without the consent of such party or person.

(9) The Office of Adjudications or a hearing officer may reject any filing for failure to comply with this subsection.

(c) **Orders, rulings, and decisions**

(1) Unless otherwise provided by law, an order, other than an order issued under section 22a-7 of the General Statutes, shall be served by personal delivery by a sheriff or other indifferent person or by certified mail, return receipt requested, or by first-class mail, or in the manner provided by law for service of civil process. An order issued under section 22a-7 of the General Statutes shall be served in accordance with the provisions of Public Act 91-301. A written ruling shall, unless distributed to all parties and intervenors at the hearing, pre-hearing conference, or oral argument, be issued by first-class mail, and three days shall be added to any time allowed for the filing of a pleading responding to a ruling which has been mailed.

(2) Unless otherwise provided by law, an order, ruling, proposed final decision, or final decision shall be deemed issued upon mailing or personal delivery.

(3) At any time after the issuance of an order, the Commissioner may correct such order for clerical errors.

(d) **Powers and duties of hearing officer**

(1) The hearing officer shall conduct a fair and impartial proceeding, assure that the relevant facts are fully elicited, adjudicate issues of law and fact, and prevent delay and harassment.

(2) In addition to any other powers provided by law, the hearing officer shall have the power to:

(A) Determine the scope of the hearing;

(B) Dispose of motions and requests and make all necessary or appropriate rulings;

(C) Administer oaths and affirmations;

(D) Subpoena witnesses and evidence, examine witnesses, and control the examination of witnesses;

(E) Admit or exclude evidence and rule on objections to evidence;

(F) Impose sanctions in accordance with subsection (e) of this section and subsection (n) of section 22a-3a-2 of these Rules of Practice;

(G) Consolidate proceedings or portions thereof;

(H) Issue proposed final decisions and, when authorized, final decisions; and

(I) Do any other acts and take any other measures to administer this section, expedite proceedings, and maintain order.

(e) **Sanctions**

If a party or intervenor or the attorney or other representative of a party or intervenor fails to comply with these Rules of Practice or with a ruling of the Commissioner or hearing officer, the Commissioner or hearing officer may, on motion or on his own initiative, impose such sanctions as he deems just and appropriate under the circumstances, including but not limited to continuance of the

proceeding, exclusion of testimony or other evidence, and the drawing of an adverse inference against the noncomplying party or intervenor.

(f) **Burdens of Proof**

Unless otherwise provided by law, in a proceeding on an order to enforce a statute, regulation or license and in a proceeding on a notice to revoke, suspend or modify a license, the Staff and other proponents of the order or notice shall have the burden of going forward with evidence and the burden of persuasion. In a proceeding on an application, the applicant and other proponents of the application shall have the burden of going forward with evidence and the burden of persuasion with respect to each issue which the Commissioner is required by law to consider in deciding whether to grant or deny the application. Each factual issue in controversy shall be determined upon a preponderance of the evidence.

(g) **Representatives**

A party or intervenor may appear in person or by an attorney or other representative. Attorneys shall conform to the standards of conduct and ethics required of practitioners before the courts of Connecticut.

(h) **Motions**

(1) A motion is any request to a hearing officer or the Commissioner.

(2) All motions shall (A) be in writing unless made orally on the record, (B) state with particularity the grounds therefor, and (C) set forth the relief or ruling sought.

(3) Within seven days of service of a written motion or such other time as the hearing officer may prescribe, any party or intervenor may file a response supporting or opposing the motion. The movant shall have no right to reply except as permitted by the hearing officer.

(4) The movant shall have the burden of demonstrating that the relief or ruling sought in the motion should be granted.

Part B—Prehearing Procedures

(i) **Answers and requests for hearing**

(1) Whenever any statute, regulation, or order provides for the filing of an answer or request for hearing with respect to an order, the answer or request for hearing shall be filed with the Office of Adjudications within the time prescribed by the applicable statute; and if not prescribed therein, by an applicable regulation other than this section; and if not prescribed therein, by the order; and if not prescribed therein, within thirty days of issuance of the order. The respondent shall attach to the answer a copy of the order.

(2) Whenever any statute or regulation provides for the filing of a request for hearing concerning the Commissioner's disposition of an application, the request shall be filed with the Office of Adjudications within the time prescribed by the applicable statute; and if not prescribed therein, by an applicable regulation other than this section; and if not prescribed therein, within thirty days of the Commissioner's action. The requester shall attach to the request a copy of the Commissioner's letter or other document disposing of the application.

(3) An answer to an order shall be deemed a request for hearing unless the answer specifically states otherwise.

(4) An answer or request for hearing shall state specifically any findings to which the respondent objects and any other grounds for contesting the order or the Commissioner's disposition of the application. The hearing officer may require, or any party or intervenor may file a motion requesting, a more particular statement from the respondent or applicant if the answer or request for hearing does not

give adequate notice of the grounds for contesting the order or the disposition of the application.

(5) An application by a respondent to the Commissioner pursuant to section 4-177(b) of the General Statutes for a more definite and detailed statement shall be made no later than the date by which the answer or request for hearing must be filed under subdivision (1) of this subsection. The filing of such an application shall not stop the running of the time period under such subdivision for filing an answer or request for hearing. The respondent may amend his answer or request for hearing within twenty days after the Commissioner issues a more definite and detailed statement.

(j) **Scheduling hearings and settlement conferences**

(1) (A) Unless when issuing an order or disposing of an application the Commissioner also issues notice of a scheduled hearing date on such order or application, the Director of the Office of Adjudications shall, upon the filing of an answer or request for hearing under subdivision (i) (1) or (2) of this section, solicit comments from the parties and intervenors concerning an appropriate date and, with respect to an application, location for hearing. Upon receipt of comments the Director shall set a date for hearing, taking into consideration the threat to the environment or public health posed by the violations or conditions alleged in the order and the parties' and intervenors' schedules.

(B) Upon scheduling the hearing, the Director of the Office of Adjudications shall mail notice of the time, place, and nature of the hearing to all parties and intervenors and to any person who has filed a request for status as a party or intervenor but whose request has not yet been disposed of.

(C) Upon scheduling the hearing, the Director of the Office of Adjudications may schedule a settlement conference. Any settlement conference shall be conducted by a referee. The purpose of the settlement conference is to determine whether the dispute can be resolved without a hearing and to facilitate such a resolution.

(D) If the referee determines during the settlement conference that resolution of the dispute without a hearing is likely, he may recommend to the assigned hearing officer that the scheduled hearing be continued to afford the parties an opportunity to submit to the hearing officer a proposed consent order or agreed draft decision under subdivision *l* (2) or (3) of this section.

(E) Each party and intervenor shall appear at any settlement conference which is scheduled. If any party or intervenor fails without good cause to appear, the referee may proceed with the conference.

(F) At least one of the attorneys or other representatives for each party and intervenor participating in the settlement conference shall have authority to enter into agreements and stipulations regarding all matters that the participants should reasonably anticipate may be discussed at the settlement conference.

(G) If no appearance is made by or on behalf of a party or intervenor at the settlement conference, or if a party or intervenor or his attorney or other representative is substantially unprepared or is unauthorized to participate fully in the conference or fails to participate in good faith, the referee may recommend to the hearing officer or, if a hearing officer has not been assigned, to the Director of the Office of Adjudications that the hearing officer or Director impose sanctions in accordance with subsection (e) of this section. Upon a recommendation of the referee, the hearing officer or Director may issue an appropriate ruling.

(H) Nothing in this subsection shall preclude the referee from meeting, whether on request or on his own initiative, with the parties and intervenors at any time for

the purpose of facilitating settlement, and nothing in this subsection shall preclude the parties from filing a proposed consent order or an agreed draft decision at any time pursuant to subsection (*l*) of this section.

(2) Neither a settlement conference nor a hearing shall be continued at the request of a party or intervenor except upon motion demonstrating that there is good cause for a continuance. In ruling on such a motion, the hearing officer or, if a hearing officer has not been assigned, the Director of the Office of Adjudications shall consider whether a continuance would prejudice the public health, safety or welfare or the environment. Any continuance granted shall be for a specific length of time.

(k) **Intervention**

(1) A person shall be granted status as an intervening party if:

(A) A statute, including but not limited to sections 22a-19 and 22a-99 of the General Statutes, confers a right to such status, provided that any conditions for party status specified in such statute have been satisfied; or

(B) Such person has filed a written request stating facts which demonstrate that (i) his legal rights, duties or privileges will or may reasonably be expected to be affected by the decision in the proceeding, (ii) he will or may reasonably be expected to be significantly affected by the decision in the proceeding, or (iii) his participation is necessary to the proper disposition of the proceeding.

(2) A person may be granted status as an intervenor if such person has filed a written request stating facts which demonstrate that his participation is in the interests of justice and will not impair the orderly conduct of the proceeding.

(3) A request for status as a party or intervenor under this subsection shall be filed no later than five days before the date of the hearing, if one has been scheduled, except that such five-day requirement may be waived by the hearing officer or the Commissioner, as appropriate, at any time before or after the commencement of the hearing for good cause shown. The request shall be served upon all parties and intervenors and any person known to have filed a request for status as a party or intervenor but whose request has not yet been disposed of.

(4) If a request for status as a party or intervenor is filed before an answer or request for hearing has been filed or the proceeding has been referred by the Staff to the Office of Adjudications, the Commissioner shall rule on the request; if the request is filed after an answer or request for hearing has been filed or the proceeding has been referred to the Office of Adjudications but before a hearing officer has been assigned, the Director of the Office of Adjudications shall rule on the request; if the request is filed after a hearing officer has been assigned, the hearing officer shall rule on the request; if the request is filed after a proposed final decision has been rendered but before a final decision has been rendered, the Commissioner shall rule on the request; if the request is filed after a motion for reconsideration under subsection (z) of this section has been made but before the Commissioner has disposed of such motion, the Commissioner shall rule on the request.

(5) Unless otherwise provided by the hearing officer, any objections to a request for party or intervenor status shall be filed within seven days of the date the objecter learns of the request.

(6) The ruling on a request for status as a party or intervenor shall be provided to the person filing the request, all parties and intervenors, and any person who has filed a request for status as a party or intervenor status but whose request has not yet been disposed of. A request under this subsection shall be construed liberally so as to further the policies and purposes of the Connecticut Environmental Protection Act, sections 22a-14 through 22a-20 of the General Statutes, and the statutes and regulations administered by the Department.

(7) The hearing officer or Commissioner, as appropriate, may restrict the participation in the proceeding of a person granted intervenor status under subdivision (2) of this section, although only to the extent necessary to promote justice and the orderly conduct of the proceeding. If a request for intervenor status under subdivision (2) of this subsection is granted, the hearing officer or Commissioner, as appropriate, shall in his ruling on the request define (A) the issues with respect to which the intervenor may participate and (B) the intervenor's rights to discovery, to introduce evidence and offer argument, and to cross-examine witnesses. The hearing officer or Commissioner, as appropriate, may amend his initial ruling concerning an intervenor's participation.

(8) Except for good cause shown, a person granted status as a party or intervenor under this subsection is bound by the hearing officer's and Commissioner's rulings issued as of the time such person filed his request for party or intervenor status. After his request has been granted, such person shall have the same rights, obligations, and privileges as all other parties and intervenors.

(*l*) **Disposition of proceeding by agreement**

(1) The Department encourages disposition of proceedings by agreement when the agreement is consistent with the policies and purposes of relevant provisions of law. Settlement discussions among parties shall not affect the obligation to file a timely answer or request for hearing.

(2) With respect to an order, after the respondent has filed a timely answer or request for hearing pursuant to subdivision (i) (1) of this section, the proceeding may be disposed of by agreement, in whole or in part, only as follows:

(A) (i) The Staff and the respondent shall file a proposed consent order, signed by at least the respondent, which sets out the terms of the agreement between the Staff and the respondent.

(ii) If no person has been granted status as a party or intervenor under subsection (k) of this section, or if a person has been granted such status but does not object to the proposed consent order, the hearing officer shall either (1) accept the proposed consent order, or (2) reject it and proceed with the hearing or as is otherwise appropriate; provided that if the hearing was scheduled because of a public request therefor or for the purpose of allowing public comment, the hearing officer shall not act on the proposed consent order until after the hearing. If the hearing officer accepts the proposed consent order and is authorized to render a final decision, he shall issue the proposed consent order as his final decision; if the hearing officer accepts the proposed consent order and is not authorized to render a final decision, he shall refer the proposed consent order, with his recommendation, to the Commissioner.

(B) If any person granted status as a party or intervenor under subsection (k) of this section objects to the proposed consent order, he shall, within seven days of service thereof, file his objection in writing or make it orally on the record, stating with particularity the grounds for the objection. With respect to an intervenor's objection, the hearing officer shall determine whether to hold a hearing on the objection. With respect to a party's objection, the hearing officer shall hold a hearing on the objection, unless it is manifestly frivolous. If the hearing officer, over the objection of a party or intervenor, issues the proposed consent order or refers it to the Commissioner, the hearing officer shall prepare a final decision or proposed final decision containing findings of fact and conclusions of law.

(3) With respect to an application, after the applicant has filed a timely request for hearing pursuant to subparagraph (i) (2) of this section or the Department has

on its own initiative scheduled a hearing, the proceeding may be disposed of by agreement only as follows:

(A) (i) The Staff and applicant shall file an agreed draft decision, signed by at least the applicant, which sets out the terms of the agreement between the Staff and the applicant, including the full text of a draft license if a license is proposed to be issued or an existing license modified.

(ii) If no person has been granted status as a party or intervenor under subsection (k) of this section, or if a person has been granted such status but does not object to the agreed draft decision, the hearing officer shall either (1) accept the agreed draft decision, or (2) reject it and proceed with the hearing or as is otherwise appropriate; provided that if the hearing was scheduled because of a public request therefor or for the purpose of allowing public comment, the hearing officer shall not act on the agreed draft decision until after the hearing. If the hearing officer accepts the agreed draft decision, he shall issue it as his proposed final decision or final decision.

(B) If any person granted status as a party or intervenor under subsection (k) of this section objects to the agreed draft decision, he shall, within seven days of service thereof, file his objection in writing or make it orally on the record, stating with particularity the grounds for the objection. With respect to an intervenor's objection, the hearing officer shall determine whether to hold a hearing on the objection. With respect to a party's objection, the hearing officer shall hold a hearing on the objection, unless it is manifestly frivolous. If the hearing officer, over the objection of a party or intervenor, accepts the agreed draft decision, the hearing officer shall include findings of fact and conclusions of law in his proposed final decision or final decision.

(4) Upon the filing of a proposed consent order or agreed draft decision, the hearing officer may require that the Staff, the respondent, and any other parties and intervenors answer questions relating to such order or decision.

(5) In a hearing held on the hearing officer's initiative under subparagraph (2) (A) (ii) or (3) (A) (ii) of this subsection or because of the objection of a party or intervenor under subparagraph (2) (B) or (3) (B) of this subsection, the parties and intervenors may raise any relevant issues.

(m) **Notices to appear and subpoenas for hearing**

(1) A party or intervenor may compel the appearance at a hearing of, or the production of documents at a hearing by, another party or intervenor by serving upon such party or intervenor a notice to appear or produce. The notice, if a notice to produce, shall state with particularity the documents which are to be produced. A copy of a notice served under this subdivision shall be filed concurrently with the Office of Adjudications. Except for good cause shown, a notice under this subdivision shall be ineffective unless it is received by the person or Staff to whom it is directed at least five days before the time designated in the notice to appear or produce.

(2) A party or intervenor may compel the appearance at a hearing of, or the production of documents at a hearing by, any person who is not a party or intervenor by the issuance of a subpoena in accordance with the following:

(A) If the party or intervenor is represented by an attorney, the attorney may issue such subpoena pursuant to section 51-85 of the General Statutes. To prevent harassment or unnecessary inconvenience to a subpoenaed witness, the hearing officer may exclude the testimony of such a witness if he did not receive the subpoena at least five days before the time designated therein to appear or produce.

(B) If the party or intervenor is not represented by an attorney, he may move the hearing officer to issue a subpoena requiring the appearance of the person or the production of the documents at the hearing. Except for good cause shown, such a motion shall be filed no later than 14 days before the hearing commences. Such a motion shall include the name and address of the person and a description of any documents to be subpoenaed, and shall state the reason for the motion. Unless the requested subpoena would be subject to quashing under subdivision (10) of this subsection and unless the hearing officer finds that the testimony or documents sought are clearly inadmissible, he shall issue the subpoena and mail or deliver it to the party or intervenor requesting it, which party or intervenor shall arrange for its service. Except for good cause shown, a subpoena issued under this subparagraph shall be ineffective unless it is received by the person to whom it is directed no later than five days before the hearing commences.

(3) Notwithstanding the provisions of subdivisions (1) and (2) of this subsection, in a proceeding on a cease and desist order pursuant to section 22a-7 of the General Statutes, the hearing officer shall, except for good cause shown, allow testimony from, or admit into evidence documents produced by, a witness to whom a notice or subpoena to appear or produce was directed under this subsection so long as such witness received the notice or subpoena at least 18 hours before the time designated in the notice or subpoena to appear or produce.

(4) A subpoena issued by the hearing officer shall contain the name of the Department and the title of the proceeding, and shall command the person to whom it is directed to appear to produce specified documents at a designated time and place.

(5) Upon notice to the parties and intervenors, the hearing officer may on his own initiative issue a notice or subpoena requiring the appearance of a party, intervenor, or other person or the production of documents at a hearing. The form and service of such notice or subpoena shall be as described in subdivision (1) or (4), as the case may be, of this subsection, and such notice or subpoena shall be subject to the provisions of subdivision (6) of this subsection.

(6) On motion made or on his own initiative, the hearing officer may: (A) quash, modify, or issue a protective order with respect to a subpoena to appear or produce issued by the hearing officer or a notice to appear if such notice or subpoena is unreasonable or requests evidence that is irrelevant or immaterial or (B) condition denial of the motion on such terms as he deems appropriate.

(7) A subpoena to appear or produce issued by the hearing officer shall advise that such subpoena may be quashed, modified, or subjected to a protective order in accordance with subdivision (6) of this subsection.

(8) A notice to appear or produce shall be personally served by a sheriff or other indifferent person or by certified mail, return receipt requested. A subpoena to appear or produce issued by the hearing officer shall be personally served by a sheriff or other indifferent person.

(9) If any party or intervenor fails to comply with a notice to appear or produce the hearing officer may impose sanctions in accordance with subsection (e) of this section. If any person fails to comply with a subpoena issued by the hearing officer, the Commissioner may apply to the superior court for enforcement of the subpoena in accordance with section 4-177b of the General Statutes.

(10) A subpoena issued by the hearing officer or a notice to appear directed to any state commissioner personally or to his deputy shall be quashed unless there is a clear showing by the party or intervenor who served the notice to appear or on whose behalf the subpoena was issued that such commissioner or deputy has personal

knowledge of relevant and material facts, that no Department employee or other person has knowledge of such facts, and that it would work an injustice if the commissioner or deputy did not testify.

(n) **Discovery**

(1) A party or intervenor may obtain discovery only if provided in this subsection. Nothing in this subsection shall require the disclosure of materials protected from disclosure under section 1-19 of the General Statutes or any other provision of law.

(2) Discovery under this subsection may commence after (A) the filing of an answer or request for hearing with respect to an order, (B) the filing of a request for hearing with respect to an application, (C) the scheduling by the Department on its own initiative of a hearing on an application, or (D) the scheduling of a hearing on a petition for declaratory ruling.

(3) (A) Except as provided in subparagraph (B) of this subdivision, a party or intervenor may serve upon any other party or intervenor a request to inspect, copy, photograph or otherwise reproduce designated documents (including but not limited to writings, drawings, graphs, charts, photographs, audio or video recordings, or computer records) which are relevant and material to the subject of the proceeding, which are in the possession, custody or control of the party, intervenor, or other person upon whom the request is served, and which can be provided by the disclosing party, intervenor, or person with substantially greater facility than they could otherwise be obtained by the party or intervenor seeking disclosure. The request shall clearly designate the documents to be inspected and copied and shall specify a reasonable place and manner of making the inspection and copies. A copy of the request shall be concurrently filed in the Office of Adjudications and served on all other parties and intervenors. Unless the parties and intervenors agree otherwise or the hearing officer provides otherwise, the cost of copying documents shall be borne by the party or intervenor requesting discovery. Nothing in this section shall be construed to require that a party or intervenor conduct any analysis or other manipulation of computer data.

(B) A party or intervenor may serve a discovery request upon another party or intervenor who is not represented by counsel only with the hearing officer's prior approval. A motion to the hearing officer seeking such approval shall (i) include a copy of the proposed discovery request, which request shall conform to the provisions of subparagraph (A) of this subdivision, and (ii) demonstrate that such request is genuinely necessary and appropriate to achieve a just and expeditious resolution of the proceeding.

(4) A party or intervenor upon whom a request for discovery is served shall either (A) comply with the request within 14 days of service thereof or (B) file an objection to the request or any part thereof within seven days of service thereof. It shall not be ground for objection that the documents sought will be inadmissible at hearing if they appear reasonably calculated to lead to the discovery of admissible evidence. Compliance with a request for discovery shall consist, at the discretion of the complying party or intervenor, either of allowing inspection and copying or of providing the requester with clean, legible copies of the originals, together with an affidavit by a person with knowledge stating that the copies are true and accurate copies of the originals. Objection to certain parts of a request for discovery shall not relieve the objecting party or intervenor of the obligation to comply with those parts of the request to which he has not objected. An objection shall state with particularity the grounds therefor. The party or intervenor making the request, and any other party or intervenor, may file a response to an objection within five days

of service thereof. If the hearing officer overrules an objection, compliance with the request shall be made at a time set by him.

(5) All evidentiary privileges recognized at common law or provided by the General Statutes, as well as the work product privilege as set forth in Chapter 8 of the Connecticut Superior Court Rules, shall apply to discovery under this subsection.

(6) Whether compliance with a request to inspect and copy documents is made by providing copies of documents or by allowing inspection and copying, the complying party or intervenor shall at the time of compliance furnish the requesting party or intervenor with an affidavit by a person with knowledge stating that the documents produced constitute a full and complete response to the request.

(7) If at any time after complying with a request for discovery, the complying party or intervenor determines that there are additional or new documents responsive to the request, within five days of such time he shall supplement his prior document production.

(8) If a party or intervenor upon whom a request for discovery has been served neither objects to the request nor complies with it in good faith, or does not obey a ruling on an objection made under subdivision (4) of this subsection, the hearing officer may impose sanctions in accordance with subsection (e) of this section. Except for good cause shown, the hearing officer shall not enforce multiple discovery requests by the same party or intervenor.

(9) A party or intervenor may move the hearing officer to issue a subpoena requiring that a person who is not a party or intervenor produce documents for the purpose of discovery. Such motion shall include the name and address of the person to whom the subpoena is to be directed and a description of the documents to be subpoenaed, and shall state the reason for the motion. A motion under this subdivision prepared by an attorney shall include a draft of the subpoena requested. Any party or intervenor making a motion under this subdivision shall serve a copy of such motion upon the person who is the subject of the requested subpoena and shall give notice in the motion that such person may, within seven days of service thereof, file an objection to issuance of the subpoena. Unless the hearing officer finds that the material sought is irrelevant and immaterial, he shall issue the subpoena and mail or deliver it to the party or intervenor requesting it, which party or intervenor shall arrange for its service. Except for good cause shown, a subpoena issued under this subdivision shall be ineffective unless it is received by the person to whom it is directed no later than five days before the date prescribed for production of the documents. A subpoena issued under this subdivision shall contain the information described in subdivisions (m) (4) and (7) of this section, shall be served in accordance with subdivision (m) (8) of this section, and may be quashed, modified, or subjected to a protective order in accordance with subdivision (m) (6) of this section. The Commissioner may enforce a subpoena issued under this subdivision in accordance with subdivision (m) (9) of this section.

(o) **Preservation of evidence**

The hearing officer may provide by any appropriate means, including the taking of oral testimony by deposition, for the preservation of relevant and material evidence when the hearing officer determines that there is a serious likelihood that such evidence will be unavailable at the time of the hearing. The hearing officer may issue subpoenas as necessary to carry out the provisions of this subsection.

(p) **Prehearing conferences**

(1) The Department encourages prehearing conferences to simplify the hearing and aid in a speedy and fair disposition of the proceeding. To those ends, a hearing

officer may, on motion or on his own initiative, schedule and hold a prehearing conference among the parties and intervenors to:

(A) Clarify and simplify the factual issues for hearing, identify the legal issues in dispute, and determine whether any legal issues should be briefed before the hearing;

(B) Stipulate to facts and the admissibility of testimony and other evidence;

(C) Identify and, as appropriate, limit witnesses to be called and documents to be offered at the hearing, and identify the matters about which each witness will testify;

(D) Mark exhibits to be admitted or offered into evidence;

(E) Dispose of pending motions and disputes about discovery; and

(F) Take such other actions as may aid in the orderly and expeditious disposition of the proceeding.

(2) The prehearing conference shall, unless impracticable, be held at least fourteen (14) days before the hearing commences.

(3) Each party and intervenor shall appear at the pre-hearing conference. If any party or intervenor fails without good cause to appear, the hearing officer may proceed with the conference and may make decisions concerning all matters for which the conference was scheduled, which decisions shall bind all parties and intervenors.

(4) At least one of the attorneys or other representatives for each party and intervenor participating in the prehearing conference shall have authority to enter into stipulations and to make admissions regarding all matters that the participants should reasonably anticipate may be discussed at the prehearing conference.

(5) After the prehearing conference, the hearing officer may, and at the request of any party or intervenor shall, issue a prehearing conference order reciting the actions taken at the prehearing conference. The prehearing conference order shall, unless modified by the hearing officer on the record, control the subsequent course of the proceeding. A prehearing conference order shall be modified only for good cause.

(6) If no appearance is made by or on behalf of a party or intervenor at a prehearing conference, or if a party or intervenor or his attorney or other representative is substantially unprepared or is unauthorized to participate fully in the conference or fails to participate in good faith, or if a party or intervenor or his attorney or other representative fails to obey a prehearing conference order, the hearing officer may impose sanctions in accordance with subsection (e) of this section or may grant an appropriate continuance to any party or intervenor prejudiced by the disobedience, or both.

(q) **Advance submission of proposed evidence**

(1) In a proceeding on an application the applicant shall, regardless whether a prehearing conference is held and unless an earlier filing is required by the hearing officer or a later filing is allowed for good cause shown, file no later than 15 days before the hearing:

(A) A copy of all documents, including the application and any amendments thereto, which the applicant plans to offer into evidence at the hearing;

(B) A list of witnesses the applicant plans to call at the hearing and a summary of the matters about which each witness will testify; and

(C) For each expert witness the applicant plans to call, a resume and a statement of the facts and opinions about which the expert will testify and a summary of the grounds for each opinion.

At the time the applicant files the foregoing papers, he shall serve a copy thereof on all parties and intervenors.

(2) In any proceeding the hearing officer may, on motion or his own initiative, direct any party or intervenor to file before the hearing the following materials, provided that a party or intervenor planning to offer written testimony on direct examination shall be required to file such testimony no later than ten days before the hearing:

(A) A copy of all documents which the party or intervenor plans to offer into evidence at the hearing;

(B) A list of witnesses the party or intervenor plans to call at the hearing and a summary of the matters about which each witness will testify;

(C) For each expert witness the party or intervenor plans to call, a resume and a statement of the facts and opinions about which the expert will testify and a summary of the grounds for each opinion; and

(D) Any other or additional material.

(3) Upon objection by a party or intervenor, the hearing officer shall not admit into evidence any document or testimony which was not submitted or identified before the hearing in accordance with subdivision (1) or a ruling under subdivision (2) of this subsection unless the party or intervenor offering the document or testimony demonstrates good cause for the failure to submit or identify it earlier. If the hearing officer admits such document or testimony, he may grant an appropriate continuance to any party or intervenor prejudiced thereby.

Part C—Hearing Procedures

(r) **Oaths**

The hearing officer shall administer the oath or affirmation, in accordance with chapter 4 of the General Statutes, to each witness, including a speaker who gives sworn testimony pursuant to subsection (t) of this section, before any evidence is taken from such witness.

(s) **Evidence, objections, offers of proof**

(1) Evidence shall be received in accordance with section 4-178 of the General Statutes. The hearing officer shall not admit any evidence which is irrelevant, immaterial, unduly repetitious, untrustworthy, or unreliable.

(2) Subject to the reasonable control of the hearing officer, all parties shall have the right to cross-examine any witness, including any speaker who gives sworn testimony pursuant to subsection (t) of this section.

(3) The hearing officer may admit into evidence, in lieu of oral testimony on direct examination, a written statement of fact or opinion prepared by a witness, other than a speaker who gives sworn testimony pursuant to subsection (t) of this section, provided that any requirements for prehearing submission of documents have been satisfied. The admissibility of the contents of the statement shall be subject to the same evidentiary rules as if such contents were presented as oral testimony. Before any such statement is read or admitted into evidence, the witness shall provide a copy of the statement to the hearing officer, the court reporter if there is one, and all parties and intervenors. The witness presenting the statement shall swear to or affirm the statement and shall be subject to cross-examination on the contents thereof.

(4) Any objection to the admission of evidence shall be supported by a concise statement of the grounds therefor. The hearing officer's ruling on the objection shall be part of the record.

(5) Whenever evidence is excluded, the party or intervenor offering the evidence may make an offer of proof. An offer of proof for excluded testimony shall consist,

at the discretion of the hearing officer, of either the excluded testimony or a summary thereof. An offer of proof for excluded documents shall consist of the insertion in the record of the documents excluded. At the discretion of the hearing officer, an offer of proof may be subject to cross-examination.

(t) **Speakers**

Any person who is not a party or intervenor nor called by a party or intervenor as a witness may make an oral or written statement at the hearing. Such a person shall be called a speaker. If the hearing officer is going to consider a speaker's statement as evidence or if the speaker wants his statement to be considered as evidence, the hearing officer shall require that the statement be made under oath or affirmation and shall permit the parties and intervenors to cross-examine the speaker and to challenge or rebut the statement. A speaker may decline to be cross-examined, but the hearing officer shall strike from the record any comments by such speaker relating to the subject on which he declines to be cross-examined. The hearing officer may control the time and duration of a speaker's presentation, and may exclude irrelevant, immaterial, or unduly repetitious comments by a speaker. A speaker shall not be entitled to cross-examine parties, intervenors, or other speakers or to object to evidence or procedure.

(u) **Failure to appear**

(1) If an applicant or declaratory ruling petitioner fails to appear at a scheduled hearing, the application or petition shall be deemed withdrawn and any right to a hearing waived. If a respondent to an order fails to appear at a scheduled hearing, the respondent's answer or request for hearing filed under subdivision (i) (1) of this section shall be deemed withdrawn and any right to a hearing waived. The applicant, petitioner, or respondent may, within no more than 14 days after the scheduled hearing date, move the hearing officer to reopen the proceeding; the motion shall be denied unless the movant demonstrates that there was compelling reason for his failure to appear.

(2) If a respondent does not appear at a scheduled hearing and does not file a timely motion to reopen, the order shall become final on the fifteenth day after the scheduled hearing date. If a respondent does not appear at a scheduled hearing and files a timely motion to reopen but the motion is denied, the order shall become final upon the issuance of the denial of the motion.

(3) If a party or intervenor does not appear at an oral argument scheduled upon his request, such request shall be deemed withdrawn and any right to oral argument waived. Such party may, within no more than 14 days after the scheduled oral argument date, move the Commissioner to reschedule oral argument. The motion shall be denied unless the movant demonstrates that there was compelling reason for the failure to appear, and the Commissioner may proceed to issue the final decision.

(v) **The record**

(1) In addition to the items specified in section 4-177 (d) of the General Statutes, for the purposes of a Department proceeding the record shall include: (A) any briefs or exceptions filed before or after issuance of the proposed final decision and (B) any correspondence between the hearing officer or Commissioner and any party, intervenor, or other person concerning the proceeding.

(2) The evidentiary record shall be maintained separately from the rest of the record. The evidentiary record shall consist, in addition to the recording of the hearing, of all documents offered into evidence (exhibits), regardless whether they are admitted. Exhibits which are not admitted shall be marked ''for identification.''

(3) The Department shall not deem a transcript of a hearing to be part of the record, and shall not transmit a transcript of a hearing to the superior court in the

event of an appeal from a Department proceeding, unless such transcript was prepared by or through the Office of Adjudications and the sealed original of which transcript, if not prepared by the Office of Adjudications, was delivered directly by the transcriber to the Office of Adjudications.

Subpart D—Post-hearing Procedures

(w) **New evidence**

Unless the hearing officer or the Commissioner, as appropriate, rules otherwise, after the hearing no further evidence shall be admitted unless it is relevant and material and there was good cause for the failure to offer it at the hearing. Whenever new evidence is admitted after the hearing, the other parties and intervenors shall be allowed an opportunity to respond to the evidence, including, if appropriate, an opportunity to cross-examine the person offering the evidence. Nothing in this subsection shall affect the provisions and requirements of subsection (z) of this section.

(x) **Post-hearing legal submissions**

The hearing officer may require or allow the parties and intervenors to file post-hearing briefs and proposed findings of fact and conclusions of law. Any assertions of fact in such briefs and findings should be supported by reference to specific portions of the evidentiary record.

(y) **Proposed final decisions and final decisions**

(1) After the hearing and the filing of any post-hearing legal submissions, the hearing officer shall, unless he has been designated by the Commissioner to issue a final decision, issue a written proposed final decision in accordance with section 4-179 of the General Statutes. If the hearing officer has been designated to issue a final decision, he shall do so in writing in accordance with section 4-180 of the General Statutes.

(2) At any time after issuance of a proposed final decision but before oral argument held pursuant to subdivision (3) of this subsection, the hearing officer may correct such decision for clerical errors and for errors of fact or law.

(3) (A) Unless otherwise specified by the Commissioner, within 15 days after personal delivery or mailing of the proposed final decision any party or intervenor may file with the Commissioner exceptions thereto. Exceptions shall state with particularity the party's or intervenor's objections to the proposed final decision, and may not raise legal issues or, subject to subsection (w) of this section, factual issues which could have been, but were not, raised at the hearing. Exceptions may be accompanied by a request for oral argument.

(B) Upon receipt of timely-filed exceptions or on his own initiative, the Commissioner shall send notice to all parties and intervenors of the date by which they may file briefs concerning the proposed final decision. Upon receipt of a timely request for oral argument or on his own initiative, the Commissioner shall schedule oral argument and send notice of the time and place thereof to all parties and intervenors; such notice shall also specify the date by which the parties and intervenors may file briefs concerning the proposed final decision. Any assertions of fact in briefs filed pursuant to this subparagraph should be supported by reference to specific portions of the evidentiary record. The date for filing briefs or for oral argument shall not be continued at the request of any party or intervenor except upon motion demonstrating that there is good cause for a continuance and that a continuance will not prejudice public health, safety, or welfare or the environment.

(C) Unless the Commissioner rules otherwise, oral argument shall be limited to the issues raised in timely-filed exceptions. The Commissioner may control the oral argument so as to allow all parties and intervenors a reasonable opportunity to present argument.

(D) After the issuance of the proposed final decision, the filing of any exceptions and briefs, and presentation of any oral argument, the Commissioner shall issue a written final decision in accordance with section 4-180 of the General Statutes. In his final decision the Commissioner may affirm, modify, or reverse the proposed final decision, in whole or in part, or may remand to the hearing officer for further proceedings, including the taking of further evidence.

(E) If in a final decision the Commissioner remands for further proceedings, such proceedings shall be governed by this section.

(z) **Reconsideration**

(1) On motion made or his own initiative, the Commissioner may reconsider, reverse, modify, or correct a final decision in accordance with section 4-181a of the General Statutes. In addition, the Commissioner may open a final decision upon a showing that (A) the final decision was prejudiced by fraud, misrepresentation, or other misconduct of a party or intervenor or (B) there is other compelling reason for opening the final decision.

(2) Any Department proceedings required by a ruling under subdivision (1) of this subsection shall be conducted in accordance with this section.

(Effective June 19, 1992)

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Repealed, May 29, 2007.

Administrative Civil Penalty

Sec. 22a-6b-1. Authority

Sections 22a-6b-1 to 22a-6b-15, inclusive, shall be known as the department's Administrative Civil Penalty Regulations.

(Adopted effective May 29, 2007)

Sec. 22a-6b-2. Purpose

The department's Administrative Civil Penalty Regulations are intended to: establish standards and procedures for assessing administrative civil penalties for violations of certain statutes, regulations, orders, and licenses administered or issued by the commissioner; expedite the department's administrative enforcement processes; remove any competitive or financial gain associated with noncompliance; insure immediate compliance and deter future noncompliance; and assure fairness and consistency in the assessment of administrative civil penalties. The department's Administrative Civil Penalty Regulations are only applicable to administrative enforcement actions as identified herein and taken hereunder.

(Adopted effective May 29, 2007)

Sec. 22a-6b-3. Definitions

As used in the department's Administrative Civil Penalty Regulations,

(1) ''100-Year Floodplain'' means that area that is identified as the 100-year flood limit or the 100-year flood boundary or the special flood hazard areas inundated by the 100-year flood on a map developed by FEMA and adopted by the municipality wherein the area is located;

(2) ''Administrative civil penalty'' means a penalty calculated in accordance with the department's Administrative Civil Penalty Regulations;

(3) ''Approval'' means an approval issued by the commissioner of any document or action required or allowed by a permit or order issued by him, or of any document or action required by regulation or statute;

(4) ''Coastal resources'' means ''coastal resources'' as defined in section 22a-93 of the Connecticut General Statutes;

(5) ''Commissioner'' means ''commissioner'' as defined in subsection (b) of section 22a-2 of the Connecticut General Statutes;

(6) ''Connecticut natural diversity data base'' means the data base defined in section 23-73 of the Connecticut General Statutes;

(7) ''Consumptive use'' means any withdrawal from or removal of the waters of the state;

(8) ''Department'' means the Connecticut Department of Environmental Protection;

(9) ''Diversion'' means diversion as defined in section 22a-367 of the Connecticut General Statutes;

(10) ''FEMA'' means the Federal Emergency Management Agency;

(11) ''Flood fringe'' means any portion of the 100-year floodplain that is not located within the floodway;

(12) ''Floodway'' means that area that is identified as the floodway on a map developed by FEMA and adopted by the municipality wherein the area is located;

(13) ''General permit'' means a general permit issued by the commissioner under section 22a-45a, 22a-208a, 22a-349a, 22a-361, 22a-378a or 22a-411 of the Connecticut General Statutes;

(14) ''Hearing officer'' means ''hearing officer'' as defined in section 4-166 of the Connecticut General Statutes;

(15) ''Inland water resources'' means those wetlands and water resources that are regulated under sections 22a-36 through 22a-45a, sections 22a-342 through 22a-349a, sections 22a-365 through 22a-379, and sections 22a-401 through 22a-411 of the Connecticut General Statutes;

(16) ''Inland wetlands'' means ''wetlands'' as defined in section 22a-38 of the Connecticut General Statutes;

(17) ''Legal requirement'' means any provision of a statute, regulation, license, order or approval issued, entered, adopted or administered by the commissioner;

(18) ''License'' means ''license'' as defined in section 4-166 of the Connecticut General Statutes;

(19) ''Order'' means ''order'' as defined in section 22a-3a-2 of the Regulations of Connecticut State Agencies, and includes a penalty notice;

(20) ''Penalty notice'' means a notice issued by the commissioner pursuant to subsection (c) of section 22a-6b of the Connecticut General Statutes, and includes an amended penalty notice;

(21) ''Permit'' means a permit issued by the commissioner under Chapter 439, 440, 441, 446i, or 446j of the Connecticut General Statutes and includes a certificate of permission, a certificate of approval pursuant to section 22a-405 of the Connecticut General Statutes, a temporary authorization or emergency authorization pursuant to section 22a-6k of the Connecticut General Statutes, and a general permit;

(22) ''Person'' means ''person'' as defined in section 22a-2 of the Connecticut General Statutes;

(23) ''Rare, threatened or endangered species'' means any species determined by the commissioner in regulations adopted under section 26-306 of the Connecticut General Statutes to be endangered, threatened, or species of special concern;

(24) ''Referee'' means an individual appointed by the Director of the Office of Adjudications to conduct a settlement conference in a department proceeding. Such individual may be an employee of the department;

(25) ''Respondent'' means a person to whom or which an order is issued;

(26) ''Staff'' means ''staff'' as defined in section 22a-3a-2(a) of the Regulations of Connecticut State Agencies;

(27) ''Tidal wetlands'' mean ''wetland'' as defined in section 22a-29 of the Connecticut General Statutes;

(28) ''Violation'' means a failure to comply with a legal requirement;

(29) ''Waters'' means ''waters'' as defined in section 22a-423 of the Connecticut General Statutes;

(30) ''Water Quality Standards'' means the standards of water quality adopted or amended by the commissioner under section 22a-426 of the Connecticut General Statutes;

(31) ''Watercourses'' means ''watercourses'' as defined in section 22a-38 of the Connecticut General Statutes; and

(32) ''Wetlands'' means ''inland wetlands'' and ''tidal wetlands''.

(Adopted effective May 29, 2007)

Sec. 22a-6b-4. Procedures

Except as may be provided in section 22a-6b of the Connecticut General Statutes and in the department's Administrative Civil Penalty Regulations, all proceedings on penalty notices shall be governed by the department's Rules of Practice, sections 22a-3a-2 and 22a-3a-6 of the Regulations of Connecticut State Agencies.

(Adopted effective May 29, 2007)

Sec. 22a-6b-5. Scope of issues at hearing

The issues that may be raised at a hearing on a penalty notice shall be pertinent to any of the following:

(1) Occurrence of the stated violation;

(2) Assessment of the administrative civil penalty;

(3) Mitigating factors; and

(4) Any other issue required by law for the commissioner to determine in a hearing on a penalty notice.

(Adopted effective May 29, 2007)

Sec. 22a-6b-6. Burden of proof

In any proceeding on a penalty notice, the staff shall have the burden of going forward and of persuasion as to the occurrence of a violation and the assessment of the penalty consistent with section 22a-6b of the Connecticut General Statutes and the department's Administrative Civil Penalty Regulations, except that the respondent shall have the burden of going forward and of persuasion as to any factor tending to mitigate the amount of the penalty assessed for such violation.

(Adopted effective May 29, 2007)

Sec. 22a-6b-7. Commissioner's powers

Nothing in the department's Administrative Civil Penalty Regulations shall affect the commissioner's authority to institute any other proceeding authorized by law.

(Adopted effective May 29, 2007)

Sec. 22a-6b-8. Method and schedule for calculating an administrative civil penalty

The requirements and procedures of this section incorporate the criteria listed in sections 22a-6b(b)(1) through 22a-6b(b)(10) of the Connecticut General Statutes, and shall be used to determine the administrative civil penalty amount for each distinct violation. The commissioner may consider any violation to be distinct for each day such violation existed. The commissioner may assess a separate administrative civil penalty for each distinct violation in order to ensure immediate or continued compliance. No administrative civil penalty assessed pursuant to the department's Administrative Civil Penalty Regulations shall exceed the maximum allowable penalty set forth in section 22a-6b of the Connecticut General Statutes.

(a) **Administrative Civil Penalty Determination.**

The penalty for each distinct violation shall be determined as follows: Calculate the amount of economic benefit resulting from the violation in accordance with subsection (b), calculate the gravity-based penalty component in accordance with subsection (c), and calculate the gravity-based penalty adjustments in accordance with subsection (d). The administrative civil penalty for each distinct violation is the sum of the economic benefit, gravity-based penalty component, and any gravity-based penalty adjustments.

(b) **Economic Benefit.**

If the respondent derived a measurable economic benefit, such as savings in money, time and effort, as a result of the violation, the commissioner shall calculate the amount of such economic benefit. Economic benefit includes but may not be limited to lower, delayed or avoided compliance costs. The commissioner need not calculate economic benefit if there is no identifiable benefit from the noncompliance or the amount of economic benefit cannot be quantified. The total economic benefit for a violation shall not be less than zero.

(c) **Gravity-Based Penalty Component.**

The gravity-based penalty component shall be calculated as follows:

(1) Inland Water Resources, Stream Channel Encroachment Lines, Water Diversion or Dam Safety Violations.

Each distinct violation of section 22a-39, 22a-42a, 22a-45a, 22a-342, 22a-345 through 22a-347, 22a-349a, 22a-368, 22a-401 through 22a-405, or 22a-411 of the Connecticut General Statutes, or of any regulation, order or permit administered or issued thereunder, or of an order issued or administered under section 22a-6 or 22a-7 of the Connecticut General Statutes to enforce any provision of sections 22a-36 through 22a-45a, sections 22a-342 through 22a-349a, sections 22a-365 through 22a-379, or sections 22a-401 through 22a-411 of the Connecticut General Statutes, shall first be evaluated in terms of its potential for harm to human health and welfare and the environment using each of the four sub-factors listed in Table 1A. The applicable sub-score under each sub-factor is the highest score that corresponds to the characteristics of the distinct violation. A sub-score of zero shall be used for any sub-factor for which none of the listed characteristics are associated with such violation. The total potential for harm score for each distinct violation is the sum of the four sub-scores.

Table 1A **Potential For Harm Sub-factors For Inland Water Resources, Stream Channel Encroachment Lines, Water Diversion Or Dam Safety Violations**	
SUB-FACTOR 1: Potential Impact To The Environment, To Human Health And Welfare, Or To Property Caused By The Violation.	
Sub-score	**Characteristics**
2	Violation involves a land disturbance of 1/2 acre or less, and erosion and sediment controls were either not installed or improperly installed or maintained; Violation involves or impacts a dam with an assigned hazard classification of ''A'' as determined in accordance with section 22a-409-2 of the Regulations of Connecticut State Agencies; Violation is within a FEMA designated flood fringe and the violation neither caused any loss of flood storage nor created a potential increase in flood heights; Violation resulted in the alteration of a wetland or watercourse, but caused either negligible or no apparent damage to such wetland or watercourse; or A water diversion violation that caused either negligible or no apparent impact on an inland water resource.
4	Violation involves a land disturbance that is greater than 1/2 acre but less than 10 acres, and erosion and sediment controls were either not installed or were improperly installed or maintained;

	Violation involves or impacts a dam with an assigned hazard classification of ''B'' or ''BB'' as determined in accordance with section 22a-409-2 of the Regulations of Connecticut State Agencies; Violation is located within a FEMA designated flood fringe and the violation either caused a loss of flood storage or caused a potential increase in flood heights; A water diversion violation that caused damage to an inland water resource, but such damage is not permanent, and the diversion has neither contributed to nor resulted in human injury or property damage; A diversion of water for consumptive use that may contribute to the degradation of surface water quality for a waterbody not meeting water quality standards as identified by the department pursuant to section 303(d) of the Federal Clean Water Act; or Violation resulted in the alteration of a wetland or watercourse, and the alteration caused damage to a wetland or watercourse but such damage is not permanent.
6	Violation involves a land disturbance that is greater than or equal to 10 acres and erosion and sediment controls were either not installed or were improperly installed or maintained; Violation involves or impacts a dam with an assigned hazard classification of ''C'' as determined in accordance with section 22a-409-2 of the Regulations of Connecticut State Agencies; Violation is located within a FEMA designated floodway; A water diversion violation that caused damage to an inland water resource, but the diversion cannot be ceased or the damage cannot be remediated, or the diversion violation has contributed to or resulted in human injury or loss of life or property damage; Violation resulted in the alteration of a wetland or watercourse, and the alteration caused permanent damage to a wetland or watercourse; or Violation caused the destruction of or damage to endangered species habitat.

Table 1A [Continued]
Potential For Harm Sub-factors For Inland Water Resources, Stream Channel Encroachment Lines, Water Diversion Or Dam Safety Violations

SUB-FACTOR 2: Quantity Or Extent Of Resource Potentially Impacted By The Violation.	
Sub-score	**Characteristics**
1	➢ Less than 5,000 square feet of wetland, watercourse, floodplain, or land riverward of a State established stream channel encroachment line; ➢ Less than 200 linear feet of watercourse; or ➢ Violation had a potential to result in a consumptive withdrawal of surface or ground water that is less than 250,000 gallons per day.
2	➢ From 5,000 to 50,000 square feet of wetland, watercourse, floodplain, or land riverward of a State established stream channel encroachment line; ➢ From 200 to 1,000 linear feet of watercourse; or

	➢ Violation had a potential to result in 250,000 to 2,000,000 gallons per day of consumptive withdrawal of surface or ground water.
3	➢ Physically impact more than 50,000 square feet of wetland, watercourse, floodplain, or land riverward of a State established stream channel encroachment line; ➢ Physically impact more than 1,000 linear feet of watercourse; or ➢ Violation had a potential to result in more than 2,000,000 gallons per day of consumptive withdrawal of surface or ground water.
SUB-FACTOR 3: Quality Or Condition Of Natural Resource Potentially Impacted By The Violation.	
Sub-score	**Characteristics**
1	Class C Inland Surface Water that is not a swamp, marsh, bog, vernal pool or wetland containing alluvial or floodplain soils; or groundwater classified as GC.[α]
2	Class B Inland Surface Water that is not a swamp, marsh, bog, vernal pool or wetland containing alluvial or floodplain soils; or groundwater classified as GB.[α]
3	Oligotrophic Lake or Class A Inland Surface Water or Class AA Inland Surface Water, or any swamp, marsh, bog, vernal pool or wetland, or groundwater classified as GA, GA*, GAA, GAAs or GAA*;[α] Coldwater fishery, special management area as described in section 26-112-46 of the Regulations of Connecticut State Agencies, or a stocked watercourse; All or a portion of the area potentially impacted is part of the Connecticut natural diversity database inventory; or The violation is located in or potentially impacts a public water supply watershed.
SUB-FACTOR 4: Potential Impact On The Department's Ability, Through its Regulatory Programs, To Prevent Or Monitor Potential Harm To Human Health And Welfare Or The Environment.	
Sub-score	**Characteristics**
1	Failure to provide notification to the department upon completion of an activity, when such notification was required by a statute, regulation, order, permit or approval.
2	Failure to obtain an authorization for a regulated activity that could have been covered under a general permit; or Failure to submit on time a monitoring or progress report, notice of commencement of an activity, non-compliance notice, or any other notice or report, except a notice of completion, required by a statute, regulation, order, permit or approval.
3	Failure to obtain a permit for a regulated activity that was not covered by a general permit, or to submit on time plans or descriptions of work, or to perform any other action required by a statute, regulation, order, permit or approval.

[α]Surface water and groundwater classifications as prescribed by the Water Quality Standards.

Each distinct violation shall then be evaluated in terms of its extent of deviation from the legal requirement using the criteria in Table 1B.

Table 1B Extent of Deviation Criteria For Inland Water Resources, Stream Channel Encroachment Lines, Water Diversion Or Dam Safety Violations	
Extent of Deviation	**Criteria**
Minor	Minimal noncompliance with the legal requirement in that the violator deviates somewhat from the requirement but that most of the requirement, or all important aspects of the requirement, were met after either minimal or no delay.
Significant	Deviation from the legal requirement that does not meet the criteria for minor deviation.

The gravity-based penalty component for each distinct violation shall comprise:

(1) A gravity-based penalty for the first day of violation, which is obtained from the appropriate subcell in the penalty matrix in Table 1C; and

(2) A gravity-based penalty for each day the violation continued beyond the first day, which is equal to the number of days such violation continued beyond the first day multiplied by an amount not less than ten percent and not greater than twenty-five percent of the first day gravity-based penalty.

Table 1C Penalty Matrix for Inland Water Resources, Stream Channel Encroachment Lines, Water Diversion Or Dam Safety Violations		
POTENTIAL FOR HARM	**EXTENT OF DEVIATION**	
Total Score	**Significant**	**Minor**
15	$ 1,000	$ 600
14	$ 930	$ 570
13	$ 860	$ 540
12	$ 790	$ 510
11	$ 720	$ 480
10	$ 480	$ 180
9	$ 424	$ 160
8	$ 368	$ 140
7	$ 312	$ 120
6	$ 256	$ 100
5	$ 110	$ 50
4	$ 100	$ 45
3	$ 90	$ 40
2	$ 80	$ 35
1	$ 70	$ 35

(2) Tidal Wetlands, Structures, Dredging and Fill Violations.

Each distinct violation of section 22a-32, 22a-359, 22a-361 or 22a-362 of the Connecticut General Statutes, or of a regulation administered or issued thereunder, or of a permit administered or issued either thereunder or under section 22a-363b or 22a-363d of the Connecticut General Statutes, or of an order administered or issued under section 22a-6, 22a-7 or 22a-363f of the Connecticut General Statutes to enforce either section 22a-32, 22a-359, 22a-361, 22a-362, 22a-363b, 22a-363d or 22a-363f of the Connecticut General Statutes or a regulation or permit administered or issued thereunder, shall first be evaluated in terms of its potential for harm to human health and welfare and the environment using each of the three sub-factors listed in Table 2A. The applicable category of harm for each sub-factor is the highest category that corresponds to the characteristics of the distinct violation. The potential for harm of such violation shall be the highest category of harm identified in the sub-factor analysis.

Table 2A
Potential for Harm Sub-factors for Tidal Wetlands, Structures, Dredging or Fill Violations

Potential for Harm Sub-Factors	Violation Characteristics	Category of Harm
1. Potential Impact to a Coastal Resource	Dredging, excavating or filling, or performing work incidental thereto, of a tidal wetland, intertidal flat, submerged aquatic vegetation or other statutorily protected coastal resource; or placing a structure or performing work incidental thereto either on, in, or affecting any tidal wetland, intertidal flat, submerged aquatic vegetation or other coastal resource.	Major
	A violation that has a significant potential to cause damage to any coastal resource, or has caused damage that can be fully remediated within one year.	Moderate
	Storage or placement of boats, floats or other material in a tidal wetland, or deposition or disposal of brush or other readily retrievable material.	Minor
2. Encroachments	Constructing a new bulkhead or seawall, or performing work incidental thereto; or excavating or filling, or performing work incidental thereto, with heavy equipment waterward of the high tide line; or constructing docks or other marine facilities, or performing work incidental thereto, for five or more boats, or greater than forty feet in length.	Major
	Constructing or placing docks or other marine facilities, or performing work incidental thereto, for two to four boats, or less than or equal to forty feet in length; non-water-dependent encroachments such as decks, gazebos and floating homes with no potential for discharges; or capping or additional riprap, concrete or rocks placed on existing erosion control structures or armored shorelines.	Moderate
	Constructing or placing a residential dock, or performing work incidental thereto, not greater than thirty feet in length for only	Minor

	one boat; or a deck, balcony or other attachment which extends waterward of the high tide line.	
3. Navigational or Riparian Interference.	Constructing or placing a structure, or performing work incidental thereto, which encroaches into a navigational channel or creates a clear and obvious obstruction to riparian access, public access, navigation, fishing or other traditional public trust use.	Major
	Constructing or placing a structure, or performing work incidental thereto, that results in less than a complete blockage or obstruction to riparian access, public access, navigation, fishing or other traditional public trust use, and creates a potential navigational or riparian interference.	Moderate
	Structures that appear to cross riparian boundaries or may affect navigation under certain conditions.	Minor

If the distinct violation does not have any of the characteristics listed in Table 2A, the potential for harm of such violation shall each be categorized as either major, moderate or minor using Table 2B.

Table 2B
Alternate Potential for Harm Characteristics for Tidal Wetlands, Structures, Dredging or Fill Violations

Category of Harm	Violation Characteristics
Major	Unauthorized activity which, without rapid and active restoration or remediation of the site or other impacted area, could create permanent resource damage, significant encroachment or acute and ongoing navigational or riparian interference, or which substantially inhibit or limit the Department's ability, through its regulatory programs, to ensure against actual or potential harm to the environment or to public health or welfare.
Moderate	Unauthorized activity that could cause a substantial adverse impact to a coastal resource, the public trust, navigational or riparian considerations, or regulatory programs, but can be more readily corrected than major impact activities; or where formal enforcement action is warranted to ensure consistency and compliance with Department regulatory programs.
Minor	Unauthorized activity that could cause only a minimal adverse impact and does not require substantial restoration of the site, or a violation having no on-site manifestation, such as a failure to file a report, plan or other form required by a permit.

Each distinct violation shall then be evaluated in terms of its extent of deviation from the legal requirement using the criteria in Table 2C.

Table 2C
Extent of Deviation Criteria for Tidal Wetlands, Structures, Dredging or Fill Violations

Category	Extent of Deviation Criteria
Major	A violation that is substantially inconsistent with legal requirements; examples include: ➢ Significant violation of a permit or order. ➢ Activity that is inconsistent with applicable statutory standards and would not have been authorized by the department. ➢ Unauthorized activity that does not modify or reconstruct any previously existing or authorized structure or work. ➢ Unauthorized activity that is significantly different in scope and scale from surrounding existing or historical activities.
Moderate	Violation that is generally consistent or can be made consistent with legal requirements through a permit authorization process or through modification of the violating activity; examples include: ➢ Unauthorized activity that might be statutorily consistent and permittable if reconfigured or modified. ➢ Unauthorized minor modifications to existing commercial facilities. ➢ Significant reconstruction or modification of pre-existing structures which does not significantly change the footprint of the structure. ➢ Activity that is not significantly different in scope and scale than surrounding or prior activities.
Minor	Unauthorized activity that was consistent with applicable statutory standards and would likely have been authorized had a timely and complete application been filed.

The gravity-based penalty component for each distinct violation shall comprise the following:

(1) A gravity-based penalty for the first day of violation, which is determined by first locating the penalty range from the appropriate subcell in the penalty matrix in Table 2D. The commissioner shall, upon consideration of all of the potential harm sub-factors evaluated for such violation, set the gravity-based penalty for the first day of violation to an amount within such penalty range;

(2) A gravity-based penalty for each day the violation continued beyond the first day, up to a maximum of one-hundred-eighty days thereafter, which is equal to either: Twenty-five percent of the first day gravity-based penalty for each day such violation continued provided the violation commenced on or before one year prior to the date of issuance of the penalty notice; or, if the violation commenced within one year prior to the date of issuance of the penalty notice, one-hundred percent of the first day gravity-based penalty for each day such violation continued, up to a maximum of thirty days, and twenty-five percent of such first day penalty for each additional day thereafter. If the violation commenced prior to the effective date of these regulations, the first day of violation shall be the first day such violation continued after such effective date; and

(3) At the sole discretion of the commissioner, a gravity-based penalty for each day the violation continued for more than one-hundred-eighty-one days, provided such violation has caused major or moderate damage to a coastal resource. The amount of such gravity-based penalty shall not exceed the number of days the

violation continued beyond one-hundred-eighty-one days multiplied by twenty-five percent of the first day gravity-based penalty.

Table 2D
Penalty Matrix for Tidal Wetlands, Structures, Dredging or Fill Violations

POTENTIAL FOR HARM	EXTENT OF DEVIATION		
	Major	**Moderate**	**Minor**
Major	$720 to $1,000	$570 to $770	$480 to $600
Moderate	$256 to $480	$160 to $288	$100 to $180
Minor	$70 to $110	$50 to $70	$35 to $50

(3) Pesticide Control Violations.

For each distinct violation of chapter 441 of the Connecticut General Statutes, or of any regulation, order or permit administered or issued thereunder, the gravity-based penalty component shall be determined using Table 3A.

Table 3A
Penalty Schedule for Pesticide Control Violations

Type of Violation	**Penalty for Minor Extent of Deviation**†	**Penalty for Significant Extent of Deviation**‡
Commercial application of pesticides without supervisory certification in violation of 22a-54(c)(1) of the Connecticut General Statutes.	Not a minor deviation.	$1000 plus $100 for each subsequent application.
Sale of a restricted use or permit use pesticide by a dealer who has not registered in violation of 22a-56(c) of the Connecticut General Statutes.	Not a minor deviation.	$1000 plus $100 for each additional sale
Sale, use or distribution of a pesticide that has not been registered in violation of 22a-61(a)(1) of the Connecticut General Statutes.	Not a minor deviation.	$800 plus $100 for each additional sale
Sale of a restricted use or permit use pesticide to a person who is not registered, certified or who has not obtained a permit in violation of 22a-57 of the Connecticut General Statutes.	Not a minor deviation.	$1000 plus $100 for each additional sale
Failure of a registered dealer to: Maintain records of the sale of restricted use or permit use pesticides or to allow inspection of such records by the commissioner in violation of section 22a-58 of the Connecticut General Statutes; or submit records to the commissioner in violation of section 22a-66-4 of the Regulations of Connecticut State Agencies; or display restricted use or permit use pesticides in a separate secure area in violation of section 22a-66-4(f) of the Regulations of Connecticut State Agencies.	$300	$1000

Failure of a certified private applicator to maintain or submit records of the use of restricted use pesticides in violation of section 22a-58 of the Connecticut General Statutes.	$100	$500
Failure of a certified commercial supervisor to maintain records of the use of pesticides in violation of 22a-58 of the Connecticut General Statutes.	$250 plus $50 for each additional violation	$750 plus $50 for each additional violation
Refusal to allow an inspection of a place where pesticides may have been used or stored, in violation of section 22a-59 or 22a-61(b)(2) of the Connecticut General Statutes, or refusal to allow inspection of records in violation of section 22a-58 or 22a-61(b)(2) of the Connecticut General Statutes.	$300	$1000
Use or sale of a pesticide that has been adulterated or misbranded as defined in section 22a-47 of the Connecticut General Statutes in violation of section 22a-61(a)(5)	Not a minor deviation.	$1000
Detaching, altering, defacing, or destroying any pesticide label in violation of section 22a-61(b)(1) of the Connecticut General Statutes.	$250	$750
Using a registered pesticide in a manner inconsistent with its labeling in violation of section 22a-61(b)(7) of the Connecticut General Statutes.	$750	$2500
Advertising or soliciting to perform work that requires a commercial supervisory certification by a person who is uncertified or holds an operator's certification, or performance of such work by a person who holds operator certification in violation of section 22a-61(d) and 22a-61(e) of the Connecticut General Statutes.	$500 plus $100 for each additional advertisement, solicitation or performance	$1000 plus $100 for each additional advertisement, solicitation or performance
Failure to post required notice of a pesticide application, or failure to post signs and provide signs at a retail establishment, or failure to provide other notification in violation of 22a-66a of the Connecticut General Statutes.	$75	$90
Failure to register or renew a registration of a pesticide application business in violation of section 22a-66c(a) of the Connecticut General Statutes.	Not a minor deviation.	$1000
Failure of a registered pesticide business to notify the commissioner of changes to the registration within 30 day of the change in violation of section 22a-66c(b) of the Connecticut General Statutes.	$200	$500
Failure to maintain or retain for the required period a pesticide application business record, or failure to include all required items in a pesticide application business record in violation of 22a-66g of the Connecticut General Statutes.	$300 plus $100 for each additional violation	$1000 plus $100 for each additional violation
Introducing a chemical into the waters of the state to control aquatic organisms without a permit in violation of section 22a-66z of the Connecticut General Statutes.	$500	$1500

Failure to comply with a requirement of a permit to apply chemicals to the waters of the state issued under 22a-66z of the Connecticut General Statutes.	$500	$1000
Failure of a certified supervisor to provide written instructions to a certified operator in violation of section 22a-66-5(g)(2) of the Regulations of Connecticut State Agencies.	$250 plus $100 for each additional application	$750 plus $100 for each additional application
Failure to obtain operator certification for use of pesticides in other than a supervisory capacity in violation of section 22a-66-5(h) of the Regulations of Connecticut State Agencies.	$500	$1000
Failure of a pesticide application business to employ a certified supervisory applicator in violation of section 22a-66f of the Connecticut General Statutes.	$500	$1000
Application of pesticides or fertilizers by aircraft without a landowner's permit; or application of pesticides or fertilizers by aircraft without an aircraft applicator's certificate in violation of section 22a-54(e)(1) of the Connecticut General Statutes.	$500	$1500
Failure to comply with a requirement of section 22a-66-7 of the Regulations of Connecticut State Agencies in violation of a permit or license to apply pesticides or fertilizer by aircraft.	$500	$1000
Failure to have check valves or other anti-siphon devices on filler hoses used to draw water for mixing pesticides or failure to cover filler hoses while spraying pesticides in violation of section 22a-66-3 of the Regulations of Connecticut State Agencies	$300	$1000

† Minor deviation means minimal noncompliance with a legal requirement in that the respondent deviated somewhat from the requirement, but all or most of the important aspects of the requirement were met, or were met after minimal delay.

‡ Significant deviation means noncompliance with a legal requirement that is not a minor deviation.

(d) **Gravity-Based Penalty Adjustments.**

For each distinct violation, gravity-based penalty adjustments shall be determined as follows:

(1) Good Faith Efforts to Comply.

A gravity-based penalty component may be adjusted downward by as much as 25% depending upon whether or not, in the sole judgment of the commissioner, the respondent had taken all steps or followed all procedures necessary or appropriate to comply or to correct the violation prior to the department's discovery of such violation. However, the commissioner need not adjust such gravity-based penalty in accordance with this provision if the respondent failed to take reasonable and prompt measures to fully comply upon respondent's discovery of such violation.

(2) History of Noncompliance.

A gravity-based penalty component may be adjusted upward by as much as 25% if the respondent has a history of a prior violation. In determining the amount of upward penalty adjustment, the commissioner shall consider all known violations,

any prior violations by the respondent of statutes, regulations, orders, permits or licenses administered, adopted or issued by the commissioner, and any judgments or orders entered by the federal government or any state or municipality against the respondent.

(3) Ability to Pay.

The gravity-based penalty component, plus any gravity-based penalty adjustments under subdivisions (1) and (2) of this section, may be adjusted based on the economic and financial conditions of the violator. The commissioner may deem a respondent to be unable to pay a gravity-based penalty if payment of such penalty would interfere with the respondent's financial ability to come into compliance or force the respondent out of business. It shall be the respondent's sole burden to assert any claim of inability to pay and to submit all documents that the commissioner reasonably believes are necessary to evaluate such claim. Any penalty adjustment for a demonstrated inability to pay may be limited if the:

(1) Violation is chronic or repeat, or causes or has the potential to cause serious harm to the environment;

(2) Respondent refuses to correct a violation; or

(3) Respondent is a business entity that is no longer doing business.

Further, any of the following does not necessarily constitute an inability to pay: Potential reduction of manager or officer salaries or employee bonuses; potential reduction of shareholder dividends; limited cash flow, but respondent is able to raise money through borrowing, selling assets, or other steps without incurring extraordinary burdens.

(Adopted effective May 29, 2007)

Sec. 22a-6b-9. Assessment of administrative civil penalty—penalty recalculation

(a) After the issuance of a penalty notice, the commissioner may recalculate the penalty assessed in such notice based on the commissioner's consideration of new or additional information pertaining to the veracity of the alleged violation or the accuracy of the assessed penalty, or based on the commissioner's consideration of the economic and financial condition of the respondent following the respondent's written claim of inability to pay.

(b) If the commissioner recalculates the penalty and the recalculated penalty can not be resolved by agreement, the commissioner may issue an amended penalty notice that assesses the recalculated penalty and states the respondent's right to request a hearing on such amended notice within 30 days after respondent's receipt of such notice. The penalty assessed in any amended penalty notice shall not be less than the economic benefit of noncompliance.

(Adopted effective May 29, 2007)

Sec. 22a-6b-10. Settlement conferences

(a) Within 30 days after receipt of a respondent's request for hearing on a penalty notice, the commissioner may schedule a settlement conference; such settlement conference shall be conducted by a referee. The purpose of such settlement conference shall be to attempt to resolve such penalty notice without the need for a hearing.

(b) If the respondent to a penalty notice fails without good cause to appear at a scheduled settlement conference, the assigned hearing officer shall schedule a hearing on such penalty notice.

(c) Promptly upon completion of a settlement conference at which the respondent appears, but in any event no later than seven days thereafter, the assigned hearing

officer shall, with respect to any penalty notice covered or scheduled to be covered at such conference, either issue a notice of hearing date on the penalty notice, or if the referee recommends to the assigned hearing officer that resolution of the dispute without a hearing is likely, the hearing officer may issue a notice of the date by which a consent order signed by the respondent to resolve such notice shall be submitted to the hearing officer by the parties. If the parties fail to submit such consent order by the established date, the hearing officer shall promptly issue a notice of hearing date on the penalty notice.

(Adopted effective May 29, 2007)

Sec. 22a-6b-11. Assessment of administrative civil penalty—resolution of penalty notice prior to completion of settlement conference

To encourage early resolution of a penalty notice, if the respondent demonstrates to the commissioner's satisfaction that the respondent has, prior to completion of the settlement conference, either corrected a violation alleged in such penalty notice, or agreed to and is in compliance with a final order from the commissioner to correct such violation, the assessed penalty for such violation shall be reduced by 20%, provided that the respondent has, prior to completion of the settlement conference, waived its right to a hearing on all parts of the penalty notice pertaining to such violation and remitted payment of the associated administrative civil penalty for such violation. The total penalty reduction granted under this section for a single penalty notice shall not exceed $20,000.

(Adopted effective May 29, 2007)

Sec. 22a-6b-12. Assessment of administrative civil penalty—resolution of penalty notice after settlement conference but prior to hearing

To encourage resolution of a penalty notice prior to hearing, if the respondent demonstrates to the commissioner's satisfaction that the respondent has, prior to hearing, either corrected a violation alleged in a penalty notice, or agreed to and is in compliance with a final order from the commissioner to correct such violation, the assessed penalty for such violation shall be reduced by 10%, provided that respondent has, after settlement conference and prior to hearing, waived its right to a hearing on all parts of the penalty notice pertaining to such violation and remitted payment of the associated administrative civil penalty for such violation after the settlement conference but prior to a hearing on said penalty notice. The total penalty reduction granted under sections 22a-6b-11 and 22a-6b-12 combined shall not exceed $20,000 for a single penalty notice.

(Adopted effective May 29, 2007)

Sec. 22a-6b-13. Assessment of administrative civil penalty—resolution of penalty notice by consent order

In negotiating a final resolution of a penalty notice, the commissioner may mitigate a penalty upon his consideration of any of the following:

(1) The risks and costs associated with further litigation and whether such litigation would best serve the public interest.

(2) Any other factors the commissioner deems appropriate, including voluntary measures the Respondent agrees to undertake to prevent pollution or enhance or preserve natural resources.

(Adopted effective May 29, 2007)

Sec. 22a-6b-14. Final decision on a penalty notice

The commissioner shall render a final decision on a penalty notice as follows:

(1) If the respondent is not found to have committed a violation alleged in a penalty notice, there shall be no penalty assessed for such alleged violation.

(2) If the respondent is found to have committed a violation alleged in a penalty notice, the penalty assessed for such violation shall be the penalty stated in such notice, except that the commissioner shall adjust an administrative civil penalty in accordance with both the evidence and the provisions of the department's Administrative Civil Penalty Regulations, provided that the adjusted penalty is not greater than the penalty stated in such notice.

(Adopted effective May 29, 2007)

Sec. 22a-6b-15. Payment of penalties

Any penalty paid under the department's Administrative Civil Penalty Regulations shall be remitted by bank check or certified check payable to ''Treasurer, State of Connecticut.'' The check shall indicate on its face ''Administrative Civil Penalty'' and the action or docket number of the penalty notice under which it is paid. The check shall be mailed or personally delivered to the Department of Environmental Protection, Bureau of Administration, 79 Elm Street, Hartford, CT 06106.

(Adopted effective May 29, 2007)

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Administer the Distribution and Expenditure of Funds in the Endangered Species, Natural Area Preserve and Watchable Wildlife Account

Sec. 22a-27*l*-1. Definitions as used in sections 22a-27*l*-1, 22a-27*l*-2 and 22a-27*l*-3

(1) ''Account'' means the endangered species, natural area preserves and watchable wildlife account established by section 22a-27*l* of the general statutes.

(2) ''Commissioner'' means the commissioner of environmental protection.

(3) ''Endangered Species'' means ''endangered species'' or ''threatened species'' as defined in section 26-304 of the general statutes.

(4) ''Essential Habitat'' means ''essential habitat'' as defined in section 26-304 of the general statutes.

(5) ''Fiscal Year'' is defined as the period July 1 through June 30 of each year.

(6) ''Natural Area Preserve'' means ''natural area preserve'' as defined in section 23-5b of the general statutes.

(7) ''Nonharvested Wildlife'' means any species of wildlife for which no open season for taking or hunting has been established by the general statutes or by the department of environmental protection.

(8) ''Wildlife'' means ''wildlife'' as defined in section 26-304 of the general statutes.

(Effective April 27, 1995)

Sec. 22a-27*l*-2. Distribution of funds in the account

(a) The commissioner shall determine whether the funds deposited into the account shall be used for:

(1) the identification, protection, conservation or management of, or the development and production of materials or facilities providing information or education concerning, endangered species, natural area preserves or nonharvested wildlife; or

(2) the promotion of the income tax contribution system established under section 22a-27*l* and promotion of the account.

(Effective April 27, 1995)

Sec. 22a-27*l*-3. Expenditure of funds

(a) The commissioner shall consider and shall expend funds in the account for one or more of the following purposes which may be undertaken by or for the department of environmental protection:

(1) research, pertaining to creating, conducting or updating new or existing inventories regarding endangered species, natural area preserves or nonharvested wildlife;

(2) gathering, preparing or disseminating information about endangered species, nonharvested wildlife, natural area preserves, or areas which may prove worthy of inclusion within a system of natural area preserves;

(3) conserving, protecting, restoring or enhancing any natural area preserve or the habitat used or inhabited by any endangered species or nonharvested wildlife;

(4) identifying, protecting, conserving, managing or monitoring any endangered species or nonharvested wildlife or ecological, scientific, educational, historical, economic, recreational or aesthetic value;

(5) educating the public about or providing access to endangered species, natural area preserves or nonharvested wildlife;

(6) identifying any species of wildlife or plant which has or could become endangered and identifying or studying the causes or reasons why such species of plant or wildlife has or may become endangered; or

(7) promotion of the income tax contribution system established under section 22a-27*l* and promotion of the account.

(b) After the close of each fiscal year, the commissioner shall prepare and maintain an accounting of how the funds in the account for the preceding fiscal year have been used.

(Effective April 27, 1995)

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Tidal Wetlands

Sec. 22a-30-1. Title and authority

These regulations shall be known as the ''Tidal Wetlands Regulations of the Connecticut Department of Environmental Protection.'' They are promulgated under the authority of Sections 22a-30 and 22a-6 of the General Statutes.

(Effective September 24, 1996)

Sec. 22a-30-2. Definitions

As used in sections 22a-30-1 to 22a-30-17, inclusive, of the Regulations of Connecticut State Agencies:

(a) The following terms are used as defined in section 22a-29 of the General Statutes: ''commissioner'', ''person'', ''regulated activity'', ''wetland'';

(b) The following terms are used as defined in section 22a-93 of the General Statutes: ''adverse impacts on coastal resources'', ''coastal resources''; ''coastal waters'', ''water-dependent uses'';

(c) ''Applicant'' means a person who files an application for a permit issued by the department pursuant to section 22a-32 of the General Statutes and who is either the owner of the land on which the proposed regulated activity will be located, a contract vendee of such owner, a lessee of such owner, or the person who will actually control and direct the undertaking of the proposed activity;

(d) ''Department'' means the department of environmental protection;

(e) ''Party'' means party as defined by section 4-166 of the General Statutes;

(f) ''Permit or license'' means license as defined by section 4-166 of the General Statutes;

(g) ''Areas formerly connected to tidal waters'' means those areas which have retained tidal wetland soil characteristics, which can support some but not necessarily all of the vegetation specified in section 22a-29 of the General Statutes upon re-establishment of a tidal connection, and to which a tidal connection can be re-established. Areas formerly connected to tidal waters shall not include:

(1) Areas which have been filled to an elevation greater than one foot above local extreme high water where such filling occurred prior to 1972 or to the adoption of a tidal wetland map for such area pursuant to section 22a-30 of the General Statutes, whichever is later;

(2) Areas to which a tidal connection has been permanently blocked or severed and where re-establishment of a tidal connection would endanger existing structures for which alternative means of protection such as floodproofing and elevation are not feasible; or

(3) Areas which are no longer wetland but which are another coastal resource as defined by section 22a-93 of the General Statutes and which function as a healthy, stable habitat.

(h) ''Local extreme high water'' means the elevation of the one year frequency tidal flood at a particular location as shown on the most recently adopted U.S. Army Corps of engineers tidal flood profile.

Other terms used but not defined herein shall be construed to have their meaning determined by common usage.

(Effective September 24, 1996)

Sec. 22a-30-3. Entrance onto private property

In the performance of his duties under sections 22a-8 through 22a-35 and section 22a-5 (d) of the General Statutes, the commissioner or his designated agent pursuant

to section 22a-6 of the General Statutes may enter at all reasonable times upon any public or private property, for the purpose of inspection and investigation to ascertain possible violations of these regulations or for the purpose of inventorying, mapping and revising maps of all wetlands.

(Effective August 11, 1980)

Sec. 22a-30-4.

Repealed, September 24, 1996.

Sec. 22a-30-5. Activities not regulated

In accordance with the provisions of sections 22a-29, 22a-361, and 22a-363b of the General Statutes, the following activities are excluded from regulation under section 22a-32 of the General Statutes and these regulations:

(1) Activities conducted by the mosquito control division of the department of health services;

(2) Conservation activities of the state department of environmental protection;

(3) Construction or maintenance of aids to navigation which are authorized by governmental authority;

(4) The emergency decree of any duly appointed health officer of a municipality acting to protect the public health;

(5) Activities authorized under a general permit issued pursuant to section 22a-361 of the General Statutes;

(6) Activities authorized under a certificate of permission pursuant to section 22a-363b of the General Statutes.

(Effective September 24, 1996)

Sec. 22a-30-6. Form and content of applications

An original application for a permit and seven (7) copies shall be filed with the commissioner containing such information and in such form as he may prescribe. Said application shall include at a minimum, the following written information and drawings:

(1) A certified copy of a notice of application published in accordance with section 22a-6g of the General Statutes;

(2) The name, home and business addresses and telephone numbers of the applicant and his agent (if the application is being submitted by a person other than the applicant);

(3) The address at which the proposed activity is to be conducted, the name of the waterbody on or adjacent to the site of the proposed activity, and any coastal resources on or adjacent to the site;

(4) If the applicant is not the owner of the property on which the activity is to take place, the name(s), home and business addresses and telephone number(s) of the owner(s) of the property(ies) on which the proposed regulated activity is to take place;

(5) The applicant's legal interest in the property on which the proposed activity is to take place, (if the applicant is not the owner);

(6) The purpose of the proposed activity, and any alternative means, other than the proposed activity, for achieving such purpose;

(7) A detailed description of the proposed activity, including construction methodology;

(8) A description of any adverse environmental impacts associated with the proposed activity;

(9) The schedule and estimated time required to complete the activity;

(10) A listing of state and federal licenses, permits or certificates which have been obtained or which are being sought for existing facilities and for the proposed activity;

(11) A listing of local permits which have been obtained or which are being sought for the proposed activity;

(12) Names and mailing address of current owners of record of adjacent lands and known claimants of water rights in or adjacent to the wetland of whom the applicant has notice;

(13) A listing of state statutes or rules which the applicant believes support the application, and a description of how the proposed activity is consistent with the applicable statutes and regulations, including but not limited to why any adverse impacts of the proposed activity are consistent with such statutes and regulations;

(14) A map or maps showing:

(A) The geographic vicinity of the property which is to be affected by the proposed activity;

(B) The area of wetland directly affected by the proposed activity including, where applicable, the ecological unit, subdivision, drawing and parcel number as shown on maps of designated wetlands on file at the offices of the department or in the town clerk's office of the town(s) in which the wetlands are located, and the surface area of the affected wetland;

(C) The site, and the location of the proposed activity thereon;

(D) Any coastal resources on or adjacent to the site;

(E) The location and design of all facilities, structures, filling, dredging or excavation which are existing at the site or are part of the proposed activity and the boundary of the affected wetland;

(15) If the proposed activity is located within the coastal boundary as defined in section 22a-94 of the General Statutes, additional information as required by the commissioner to determine whether the proposed activity is consistent with sections 22a-90 through 22a-96 of the General Statutes, including but not limited to any adverse impacts of the proposed activity on coastal resources, future water-dependent development activities, or public access to or along the public beach and tidelands waterward of mean high water;

(16) Additional information required by the commissioner based on his preliminary review of the application;

(17) Additional information which the applicant considers relevant.

(Effective September 24, 1996)

Sec. 22a-30-7. Processing of an application

(a) **Copies of application to be provided.** The commissioner shall cause copies of all complete applications submitted under these regulations to be provided to all persons required to receive such applications pursuant to section 22a-32 of the General Statutes.

(b) **Public notice.** Following the receipt of a complete application, the commissioner shall publish a public notice of his intent to conduct or waive a hearing on such application in a newspaper having general circulation in the town or towns in which the proposed regulated activity or any part thereof is located. Such notice shall contain the information listed in subsection (c) and shall be issued in accordance with the provisions of sections 22a-361 and 22a-32 of the General Statutes.

(c) **Content of public notices.** Public notices issued pursuant to subsection (b) of these regulations shall include at a minimum the following:

(1) A reference to the particular sections of the statutes and regulations pertinent to the consideration of the application;

(2) A short and plain statement of the matters relevant to the consideration and evaluation of the application including:

(A) A concise description of the proposed activity;

(B) The specific geographic location of the activity or address of the property on which the proposed activity is to occur;

(C) The name of the applicant and his designated agent if applicable;

(D) The name of the owner of record of the property on which the proposed regulated activity is to be conducted, if the applicant is not the owner;

(E) Where applicable, the ecological unit, subdivision, drawing and parcel number(s) from the wetland map showing the wetland on which the proposed regulated activity is to be conducted;

(F) The date of the plans showing the proposed activity;

(G) The address and location of the office(s) at which the complete applications on file for inspection; and

(H) Any additional information the commissioner deems necessary.

(3) In the event a hearing is to be held, a statement of the date, time, place, nature of the hearing and a statement of the legal authority and jurisdiction under which the hearing is to be held;

(4) In the event the hearing is proposed to be waived, a comment period for receipt of written comments on the application. The comment period shall run for a period not less than forty (40) days nor more than forty-five (45) days from the date of issuance of the notice of intent to waive the public hearing.

(5) The commissioner's tentative decision regarding the application, pursuant to sections 22a-32 and 22a-361 of the General Statutes.

(d) **Hearing upon receipt of a petition.** When the commissioner receives a petition submitted in accordance with section 22a-32 of the General Statutes, he shall hold a public hearing on the application in question and shall publish a public notice of said hearing in accordance with said section.

(e) **Copies of public notices of applications to be provided.** The commissioner shall provide, by certified mail, return receipt requested, copies of all public notices of applications issued pursuant to section 22a-32 of the General Statutes to all persons required to receive such notice under sections 22a-32 and 22a-361 of the General Statutes.

The commissioner may provide, by first class mail, copies of all public notices of application issued pursuant to section 22a-32 of the General Statutes to the following persons or agencies:

(9) Any state, federal and municipal agencies whose regulatory or managerial functions or interests are affected by the project or its effect on the wetland as determined by the commissioner;

(10) Other persons or agencies which have indicated in writing to the commissioner, their desire to receive such notices.

(Effective September 24, 1996)

Secs. 22a-30-8—22a-30-9.

Repealed, September 24, 1996.

Sec. 22a-30-10. Criteria for review

(a) In accordance with section 22a-30 of the General Statutes, as amended by Public Act 79-170 and Public Act 80-356, the commissioner establishes the criteria

of this section for granting, denying or limiting permits giving due regard to the impact of regulated activities on the wetlands of the state, adjoining coastal and tidal resources, navigation, recreation, erosion, sedimentation, water quality and circulation, fisheries, shellfisheries, wildlife, flooding and other natural disasters and water-dependent use opportunities as defined in chapter 444. These criteria are consistent with and implement the statutory policies and standards contained in sections 22a-28 and 22a-33 of the General Statutes and section 22a-92 of the General Statutes, as amended by Public Act 79-535. The commissioner shall grant, or grant with limitations or conditions a permit to conduct a proposed activity on any wetland only if it is determined that the application is consistent with all applicable criteria set forth herein.

(b) **Criteria for preservation of wetlands and prevention of their despoliation and destruction.** In order to make a determination that a proposed activity will preserve the wetlands of the state and not lead to their despoliation and destruction the commissioner shall, as applicable, find that:

(1) There is no alternative for accomplishing the applicant's objectives which is technically feasible and would further minimize adverse impacts;

(2) Any structure or fill will be no greater in length, width and height than necessary to accomplish its intended function;

(3) Pile supported construction will be used to the fullest extent practicable;

(4) All reasonable measures which would minimize the adverse impacts of the proposed activity on the wetlands of the state and adjoining coastal and tidal resources are incorporated as limitations on or conditions to the permit.

(c) **Recreational and navigational uses.** In order to make a determination that a proposed activity will not destroy existing or potential recreational or navigational uses, the commissioner shall, as applicable, find that:

(1) The proposed activity will not unreasonably interfere with established public rights of access to and use of wetlands, or with access to the portion of the shoreline below the mean high tide elevation that is held in public trust by the state, or with access to and use of public recreational facilities, both in operation and planned;

(2) The proposed activity will not be located in a way which unreasonably interferes with a navigable channel or small craft navigation;

(3) The proposed activity will not cause or contribute to sedimentation problems in adjacent or nearby navigable waters, navigation channels, anchorages or turning basins.

(d) **Erosion and sedimentation.** In order to make a determination that a proposed activity will not cause or produce unreasonable erosion or sedimentation the commissioner shall, as applicable, find that:

(1) The proposed activity will not cause significant changes in current patterns, water velocity or exposure to storm or wave conditions which result in adverse effects on erosion or sedimentation patterns;

(2) Temporary erosion control measures will be utilized on the project site both during and after construction;

(3) When permanent erosion control measures are proposed, non-structural alternatives are utilized unless structural alternatives are demonstrated to be unavoidable and necessary to protect infrastructural facilities, water-dependent uses and existing inhabited structures;

(4) Any structure or fill shall:

(A) Not cause a significant adverse impact on the movement of sediments on or along the shoreline;

(B) Not cause erosion of adjacent or downdrift areas;

(C) If necessary, include provision for the transfer of sediment to downdrift areas to prevent those areas from being deprived of sediments;

(5) The perimeter of all areas proposed to be filled, dredged or excavated are suitably stabilized to prevent spillover or erosion of material into adjoining wetland or watercourse areas;

(6) When areas are proposed to be dredged:

(A) They are laid out so as to make the best practical use of existing water depths;

(B) They are designed to avoid siltation of any existing natural or established navigation channel;

(C) The best available methods are used to reduce sedimentation.

(e) **Marine fisheries, shellfisheries, and wildlife.** In order to make a determination that a proposed activity will not result in significant adverse impacts on marine fisheries, shellfisheries or wildlife the commissioner shall, as applicable, find that:

(1) The existing biological productivity of any wetland will not be unreasonably affected;

(2) Habitat areas, such as habitat of rare and endangered wildlife and fish species, will not be destroyed, filled, or otherwise unreasonably affected;

(3) Wildlife and their nesting, breeding or feeding habitats will not be unreasonably reduced or altered;

(4) Erosion from the proposed activity will not result in the formation of deposits harmful to any fish, shellfish or wildlife habitat;

(5) Shellfish beds will not be adversely affected by changes in:

(A) Water circulation and depth patterns around and over the shellfish beds;

(B) Natural relief of shellfish beds;

(C) Grain size and distribution of sediment in shellfish beds;

(6) The timing of construction activities takes into consideration the movements and lifestages of fish, shellfish, and wildlife;

(7) The proposed activity will not unreasonably interfere with the harvesting or maintenance of leased, franchised or natural shellfish beds.

(f) **Circulation and quality of coastal or tidal waters.** In order to make a determination that a proposed activity will not result in a significant adverse impact on the circulation and quality of coastal or tidal waters the commissioner shall, as applicable, find that:

(1) The proposed activity will not cause the significant adverse alteration of patterns of tidal exchange or flushing rates, freshwater input or existing basin characteristics and channel contours;

(2) Water stagnation will be neither caused nor contributed to, and the ability of wetlands and adjacent water bodies to flush themselves will not be adversely affected;

(3) Pile-supported construction will be utilized to the fullest extent practical;

(4) The proposed activity will not result in water pollution which unduly affects:

(A) The bottom fauna;

(B) The physical or chemical nature of the bottom;

(C) The propagation and habitats of shellfish, finfish and wildlife.

(g) **Protection of life and property from hurricanes or natural disaster.** In order to make a determination that a proposed activity is consistent with the need to protect life and property from hurricanes or other natural disasters, including flooding, the commissioner shall, as applicable, find that:

(1) The proposed activity will not increase the potential for flood or hurricane damage on adjacent or adjoining properties;

(2) The proposed activity will not increase the exposure of any property, land or structures to damage from storm waves and erosion produced thereby;

(3) The proposed activity will not result in significant increase in the velocity or volume of flood water flow both in streams and estuaries;

(4) The proposed activity will not significantly reduce the capacity of any stream, river, creek or other water course to transmit flood waters generated by hurricanes or other storm events and will not result in significantly increased flooding either up or downstream of its location.

(h) **Criteria for water dependent use of tidal wetlands.** In order to make a determination that a proposed activity within the coastal boundary, as defined and mapped in accordance with section 22a-94 of the General Statutes as amended by section 4 of Public Act 79-535, is consistent with the state policy that water-dependent uses of the shorefront be given highest priority and preference, the commissioner shall, as applicable, find that:

(1) When the proposed activity is not a water-dependent use:

(A) The wetland is unsuitable for or incapable of supporting a water-dependent use;

(B) There is little or no demonstrable demand for water-dependent uses suitable for or capable of being supported by the wetland;

(C) A non-water-dependent use has substantially fewer adverse impacts than all water-dependent uses suitable for or capable of being supported by the wetland;

(2) All reasonable measures which would minimize adverse impacts on future water-dependent uses are incorporated as limitations on or conditions to the permit;

(3) The proposed activity will not unreasonably interfere with the riparian rights of adjacent landowners or claimants of water or shellfish rights in or adjacent to the wetland.

(i) **Special standards for the placement of sewer or water services.** The commissioner shall disapprove extension of sewer and water services into tidal wetlands located within the coastal boundary, defined in section 22a-94 of the General Statutes as amended by section 4 of Public Act 79-535, except that, when necessary to abate existing sources of pollution, sewers that will accommodate existing uses with limited excess capacity may be used.

(j) **Special standards for the siting or expansion of airports.** The commissioner shall disallow the construction of major new airports and shall discourage the substantial expansion of existing airports on any wetland located within the coastal boundary defined by section 22a-94 of the General Statutes as amended by section 4 of Public Act 79-535. Further, he shall require that any expansion or improvement of airports involving regulated activities within any wetland located within said coastal boundary shall minimize adverse impacts on the wetland or other coastal resources, recreation or access.

(Effective August 11, 1980)

Sec. 22a-30-11. Use guidelines

(a) The classes of activities listed in this section are established for the purposes of providing guidance to prospective applicants and to the public when determining the potential acceptability of proposed regulated activities to be undertaken within the boundaries of a wetland. Nothing in this section shall be construed as constituting approval or disapproval of any activity prior to the decision on a permit. All activities except those specifically exempted by section 22a-29 (3) of the General Statutes are subject to the permit requirements of these regulations. Since the physical and biological conditions within the wetlands of the state vary with respect to location,

tidal range, soil condition, water quality, sediment supply and the character of the surrounding upland each activity must be judged as to its acceptability on a case-by-case basis.

(b) **Activities which may be generally compatible under certain conditions.** The following activities may be generally compatible with the functions of wetlands and with established public policy for their management under certain conditions. Nothing in this subsection shall be construed as constituting conditional approval of any activity prior to regulatory review and the decision on a permit. The conditions listed with each activity are minimum conditions. All activities listed in this subsection are further subject to any conditions or limitations which the commissioner deems necessary on a case-by-case basis to carry out the provisions of these regulations:

(1) Conservation activities, except those not regulated pursuant to section 22a-29 of the General Statutes, such as habitat restoration or wildlife management, which:

(A) Do not require significant physical alteration of the wetland;

(B) Do not result in continuous compaction of the peat soils;

(2) Placement of small piers, catwalks, floats, docks, piles and other similar structures including trails and pedestrian access routes when:

(A) They do not involve dredging or filling of the wetland surface;

(B) They are elevated on low-impact pile foundations;

(C) They do not interfere with or obstruct navigation;

(D) They do not restrict tidal circulation or flushing;

(3) Repair, relocation and/or rearrangement of floating docks, open pile docks, and similar structures within an established marina or boat basin where such activities involve no disturbance of wetland other than removing and relocating anchors or pilings;

(4) Placement of pipes and cables when:

(A) They are installed below grade;

(B) They are sited to take advantage of existing areas of disturbances or existing transportation corridors;

(C) Damage to the wetland systems as a result of construction activities is minimized;

(D) The wetland is restored to its natural condition following construction;

(E) Appropriate erosion and sedimentation controls are instituted so as to minimize impacts on water quality and sedimentation in surrounding areas;

(5) Stormwater drainage structures when:

(A) The pipe empties into streams or ditches within the wetland rather than directly onto the wetland surface;

(B) The discharge pipe and head wall do not project unnecessarily onto or require fill of the wetland surface;

(C) The velocities of the discharged water are not sufficiently large to cause erosion or scouring of the wetland's surface or vegetation;

(D) The discharge pipe is equipped with catch basins which are cleaned sufficiently often to maintain unimpaired function;

(6) Erection of water-dependent industrial and commercial facilities when:

(A) Elevated pile-supported construction is utilized;

(B) They do not interfere with the circulation of tidal or coastal waters;

(C) The facilities are designed to minimize the destruction of indigenous wetland vegetation;

(D) They do not significantly affect native wildlife, finfish or shellfish populations;

(E) Their encroachment into wetland areas is limited to that minimally necessary to provide structural stability;

(F) There is no alternative for accomplishing the applicant's objective which is technically feasible and which further minimizes adverse impacts;

(G) The height, width and length of structures are limited to the minimum dimensions necessary to accomplish their intended function;

(7) Construction of boat launching ramps when:

(A) All parking is provided on upland;

(B) Encroachment into the wetland is limited to the minimum necessary to provide access to coastal or tidal waters;

(8) Erection of power transmission lines when:

(A) They do not alter the topography of the wetland;

(B) Permanent' vehicular accessways to the structure are not constructed in the wetland;

(C) Alternative routes have been explored and found to be infeasible;

(D) Encroachment onto the wetland is limited to the minimum necessary to achieve structural stability.

(c) **Activities which are generally incompatible.** The following activities are generally incompatible with the functions of wetlands and with established public policy for their management. Nothing in this subsection shall be construed as constituting disapproval of any activity prior to regulatory review and the decision on a permit:

(1) Dredging;

(2) Filling;

(3) Installation of electric, gas, water or other utilities which would change the natural contours of the wetland or prevent reestablishment of wetland vegetation or impede tidal circulation;

(4) Installation of drainage control structures such as dry wells, retention basins, filters, open swales, or ponds;

(5) Disposal of dredged materials;

(6) Grading;

(7) Excavation;

(8) Construction of solid fill docks;

(9) Construction of bulkheads, groins, revetments, berms and other shoreline stabilization structures;

(10) Construction of dikes and tidal gates or maintenance, repair or replacement of dikes and tidal gates which have not been maintained in serviceable condition during the period immediately prior to the proposed maintenance, repair or replacement;

(11) Construction of single family dwellings or multiple family dwellings on fill;

(12) Construction of commercial or industrial use facilities or public buildings which do not require water access, and construction of water-dependent commercial or industrial use facilities or public buildings on fill;

(13) Construction or substantial expansion of airports, runways and any accessory facilities to support air transportation, not including maintenance of existing facilities.

(Effective August 11, 1980)

Sec. 22a-30-12. Permits

(a) **Duration of permit, initiation of activity.** All activities initiated under a permit issued pursuant to these regulations shall be completed within the time period

specified in the permit. The commissioner, in writing, may extend a permit upon receipt of a written request stating a valid reason for such an extension.

(b) **Other permits and licenses; property rights.** Any permit issued pursuant to these regulations shall be subject to and in no way derogate any present or future property rights or powers of the State of Connecticut and convey no property rights in real estate or material including riparian or littoral rights nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected by it. Obtaining any other applicable permit or license is solely the responsibility of the applicant.

(Effective August 11, 1980)

Sec. 22a-30-13. Financial security

The commissioner may require the posting of a bond, letter of credit, or other financial security in accordance with sections 22a-33 and 22a-6 of the General Statutes securing to the state compliance with conditions and limitations set forth in the permit.

(Effective September 24, 1996)

Sec. 22a-30-14. Monitoring and enforcement

(a) **Violations defined.** Any person who commits, takes part in, or assists in any violation enumerated herein shall be subject to the penalties and remedies provided in subsection (c) and to such other penalties and remedies as the law may provide. The commissioner may issue a notice of violation if he determines that any person has engaged in or is engaging in any activity not in compliance with these regulations or sections 22a-28 through 22a-35 of the General Statutes. Such activities may include but are not limited to:

(1) Engaging in any regulated activity in any wetland without having obtained a permit from the commissioner;

(2) Not complying with the conditions or limitations placed on a permit;

(3) Exceeding the scope of work set forth in an application;

(4) Not complying with the terms and conditions set forth in an application;

(5) Obtaining a permit through deception or through inaccurate information as to either the activity or its environmental impact.

(b) **Notice of violation.** The notice of violation shall describe the nature of the violation, the section or sections of the statutes or these regulations with which the person is not in compliance, and request appropriate remedial action.

(c) **Remedies and penalties for violations.** If the commissioner determines that any person has committed, taken part in or assisted in any violation as described in subsection (a) of these regulations he may:

(1) Issue an order, pursuant to section 22a-6 of the General Statutes, or, a cease and desist order, pursuant to section 22a-7 or section 22a-363f of the General Statutes, directing such person to halt any and all regulated activity or other violations, and to take appropriate remedial action, in accordance with the rules of practice of the department, sections 22a-3a-5 and 22a-3a-6 of the Regulations of Connecticut State Agencies;

(2) Revoke or suspend any permit in accordance with subsection (e);

(3) Bring an action for forfeiture and the cost of restoration pursuant to section 22a-35 of the General Statutes;

(4) Seek a temporary or permanent injunction pursuant to section 22a-6(3) and section 22a-35 of the General Statutes;

(5) Institute a suit to recover for damages, costs and expenses pursuant to section 22a-6a of the General Statutes;

(6) Impose a civil penalty pursuant to section 22a-6a of the General Statutes and regulations thereunder;

(7) Cause the bond or other security required pursuant to section 22a-30-13 of these regulations to be forfeited;

(8) Institute other legal remedies provided for by statute;

(d) **Application for maintenance of a violation.** If any person files an application seeking the commissioner's authorization of an activity which, if unpermitted, would constitute a violation as described in subsection (a) of this section, the commissioner may suspend processing of such application until such violation has been abated and any enforcement action has been finally resolved. In determining whether to suspend processing of such application, the commissioner shall consider whether the activity constituting a violation occurred prior to 1980, interferes with navigation or littoral or riparian rights, or causes adverse impacts to coastal resources as defined by section 22a-93 of the General Statutes, and whether the applicant acquired his property interest in the site of the violation after such violation occurred, is not otherwise liable for the activity as a result of actions taken prior to the acquisition, and did not know and had no reason to know of the violation. The commissioner shall notify the applicant of any suspension of processing of such application and shall consider any arguments raised by the applicant as to why the processing of such application should not be suspended. The commissioner shall include as part of his final decision on such application a finding of whether or not the regulated activity was in violation of section 22a-32 of the General Statutes. If the commissioner determines that such violation has occurred he may:

(1) Deny the permit and refer the application to the office of the attorney general for action pursuant to section 22a-35 of the General Statutes;

(2) Grant the application in part with limitations and conditions and deny it in part, and refer the denied portion of the application to the office of the attorney general for action pursuant to section 22a-35 of the General Statutes;

(3) Grant the application with limitations and conditions;

(4) Institute other legal remedies provided for by statute.

If the commissioner determines that such violation has occurred, a decision to grant a permit for the regulated activity in whole or in part shall not preclude his seeking other applicable remedies listed in subsection (c) or any other remedy concerning the violation available to him at law or in equity. If the commissioner determines that a violation has occurred and if the permit is granted in part and denied in part, the permit shall not be effective until the applicant has, as determined by the commissioner, restored that portion of the wetland for which the permit was denied.

(e) **Suspension and revocation.** In accordance with section 22a-33 of the General Statutes, the commissioner may suspend or revoke a permit if the commissioner finds that the applicant has not complied with any of the conditions or limitations set forth in the permit or has exceeded the scope of work as set forth in the application. The commissioner may suspend a permit if the permittee fails to comply with the terms and conditions set forth in the application. Such suspension or revocation shall be in accordance with section 4-182 of the General Statutes and 22a-3a-5 of the Regulations of Connecticut State Agencies.

(f) **Other remedies not excluded.** Nothing in these regulations shall be taken as limiting or excluding such other remedies as are available to the commissioner for the protection of wetlands.

(Effective September 24, 1996)

Sec. 22a-30-15. Appeals

An appeal may be taken by the applicant or any person or corporation, municipal corporation or interested community group other than the applicant who has been aggrieved by such order from the denial, suspension or revocation of a permit or the issuance of a permit or conditional permit in accordance with the provisions of section 22a-34 of the General Statutes and Chapter 54 of the General Statutes.

(Effective August 11, 1980)

Sec. 22a-30-16. Conflict and severance

(a) **Conflict with other regulations.** Where there is a conflict between the provisions of these regulations and those of any other regulation administered by the department, the provisions of the regulation which imposes the most stringent standards for the use of the wetland shall govern.

(b) **Invalidity of certain parts of regulations.** The invalidity of any word, clause, sentence, section, part or provision of these regulations shall not affect the validity of any other part which can be given effect without such invalid part or parts.

(Effective August 11, 1980)

Sec. 22a-30-17. Joint processing

In accordance with section 22a-96 of the General Statutes and section 21 of Public Act 79-535 the commissioner may, by mutual agreement with any federal body having jurisdiction over any activity in a wetland, provide for joint processing of any application under these regulations with any application for a permit or other processing required by such body, including provisions for joint notices and hearings, joint application materials and instructions for applicants, timely exchange of technical information related to permits, and coordination of the timing and sequence of issuance of permit decisions.

(Effective August 11, 1980)

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Inland Wetlands and Water Courses Regulations of the Connecticut Department of Environmental Protection

Sec. 22a-39-1. Title and authority

These regulations shall be known as the ''Inland Wetlands and Water Courses Regulations of the Connecticut Department of Environmental Protection.''

(Effective February 25, 1974)

Sec. 22a-39-2. Definitions

Definitions, as used in these regulations:

1. ''The Act'' means Sections 22a-36 to 45 inclusive of the General Statutes, as amended;

2. ''Commissioner'' means the Commissioner of the Department of Environmental Protection;

3. ''Department'' means the Department of Environmental Protection;

4. ''Deposit'' includes, but shall not be limited to fill, grade, dump, place, discharge or emit;

5. ''Discharge'' means the emission of any water, substance or material into waters of the State of Connecticut whether or not such substance causes pollution;

6. ''License'' means the whole or any part of a permit, certificate of approval or similar form of permission which may be required of any person by the provisions of these regulations or the Act;

7. ''Local Inland Wetlands Agency'' means the agency empowered by municipal ordinance to implement and administer the Act and having jurisdiction over the inland wetlands and water courses of such municipality;

8. ''Material'' means any substance, solid or liquid, organic or inorganic, including but not limited to soil, sediment, aggregate, land, gravel, clay, bog, mud, debris, sand, refuse, or waste;

9. ''Person'' means any person, firm, partnership, association, corporation, company, organization or legal entity of any kind, including municipal corporations, government agencies or subdivisions thereof;

10. ''Pollution'' means any harmful thermal effect or the contamination or rendering unclean or impure of any wetlands or water courses of the State of Connecticut by reason of any waste or other materials discharged or deposited therein by any public or private sewer, or otherwise, so as directly or indirectly to come in contact with any wetlands or water courses;

11. ''Regulated activity'' means any operation within or use of a wetland or water course as listed in Section 4.2 of these regulations;

12. ''Regulated Area'' means any wetland or water course as defined in these regulations;

13. ''Remove'' includes, but shall not be limited to drain, excavate, mine, dig, dredge, suck, bulldoze, dragline, or blast;

14. ''Rendering unclean or impure'' means any alteration of the physical, chemical or biological properties of any wetlands or water courses of the State of Connecticut, including but not limited to change in color, odor, turbidity or taste;

15. ''Significant impact or major effect'' means:

a. Any activity involving a deposition of material which will or may have a substantial adverse effect on the regulated area or on another part of the inland wetland or water course system or

b. Any activity involving a removal of material which will or may have a substantial adverse effect on the regulated area or on another part of the inland wetland or water course system or

c. Any activity which substantially changes the natural channel or may inhibit the natural dynamics of a water course system or

d. Any activity which substantially diminishes the natural capacity of an inland wetland or water course to support desirable biological life, prevent flooding, supply water, assimilate waste, facilitate drainage, and/or provide recreation and open space;

16. ''Soil Scientist'' means an individual duly qualified in accordance with standards set by the United States Civil Service Commission;

17. ''Waste'' means sewage or any substance, liquid, gaseous, solid or radioactive, which may pollute or tend to pollute any wetlands or water courses of the State of Connecticut;

18. ''Water Courses'' means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, public or private, which are contained within, flow through or border upon the State of Connecticut or any portion thereof, not regulated pursuant to Sections 22-7h to 22-7o inclusive of the General Statutes, as amended;

19. ''Wetlands'' means land, including submerged land, not regulated pursuant to Sections 22-7h to 22-7o inclusive of the General Statutes, as amended, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and flood plain by the National Cooperative Soil Survey (as may be amended from time to time) of the U.S. Soil Conservation Service.

(Effective February 25, 1974)

Sec. 22a-39-3. Permitted operations and uses

Sec. 22a-39-3.1. Uses permitted as of right

The following operations and uses shall be permitted in inland wetlands and water courses, as of right:

a. Grazing, farming, nurseries, gardening, and harvesting of crops and farm ponds of three acres or less;

b. A residential home (i) for which a building permit has been issued or (ii) on a subdivision lot, providing the permit has been issued or the subdivision has been approved as of the effective date of promulgation of municipal regulations pursuant to the Act or in the absence thereof, as of the effective date of these regulations, whichever occurs first;

c. Boat anchorage or mooring;

d. Uses incidental for the enjoyment and maintenance of a residential property, such property defined as the largest minimum residential lot site permitted anywhere in the municipality, provided that in any town where there are no zoning regulations establishing minimum residential lot sites, the largest minimum lot site shall be two acres. Such incidental uses shall include maintenance of existing structures and landscaping, but shall not include removal or deposition of substantial amounts of material from or into a wetland or water course, or diversion or alteration of a water course;

e. Construction and operation, by water companies as defined in Section 16-1 of the General Statutes, or by municipal water supply systems as provided for in Chapter 102 of the General Statutes, of dams, reservoirs and other facilities necessary to the impounding, storage and withdrawal of water in connection with public water

supplies, except as provided in Sections 25-110 and 25-112 of the General Statutes, as amended.

(Effective February 25, 1974)

Sec. 22a-39-3.2. Uses permitted where indigenous character of land is not disturbed

The following operations and uses shall be permitted, as nonregulated uses in wetlands and water courses provided they do not disturb the natural and indigenous character of the land. ''Disturbing the natural and indigenous character of the land'' means that the activity will significantly disturb the inland wetland or water course by reason of removal or deposition of material, will cause the alteration or obstruction of water flow, or will result in the pollution of the wetland or water course.

a. Conservation of soil, vegetation, water, fish, shellfish and wildlife;

b. Outdoor recreation including play and sporting areas, golf courses, field trails, nature study, horseback riding, swimming, skin diving, camping, boating, water skiing, trapping, hunting, fishing and shellfishing where otherwise legally permitted and regulated.

(Effective February 25, 1974)

Sec. 22a-39-4. Licensing of regulated activities within regulated areas

Sec. 22a-39-4.1. Regulated activities to be licensed

Subject to the provisions of Sections 3, 4.3 and 4.4 hereof, regulated activities affecting wetlands and water courses within the State of Connecticut are prohibited except as they may be licensed 1) by the local inland wetlands agency, or 2) after June 30, 1974 by the Commissioner in the event that no local inland wetlands agency of competent jurisdiction is in operation.

(Effective February 25, 1974)

Sec. 22a-39-4.2. Regulated activities

The local inland wetlands agency or the Commissioner shall regulate only those activities which:

a. remove material from,

b. deposit material in,

c. obstruct,

d. construct,

e. alter, or

f. pollute inland wetlands and water courses.

(Effective February 25, 1974)

Sec. 22a-39-4.3.a. Activities to be regulated solely by the commissioner

The Commissioner shall regulate the following activities to the exclusion of the local inland wetlands agencies:

(1) Construction or modification of any dam, pursuant to Sections 25-110 and 25-112 of the General Statutes, as amended;

(2) Construction or placement of any obstruction within channel encroachment lines, pursuant to Sections 25-4a to g of the General Statutes, as amended;

(3) Construction or placement of any structure or obstruction within tidal, coastal and navigable waters, pursuant to Sections 25-7b to e of the General Statutes, as amended;

(4) Diversion of water for public and domestic use, pursuant to Sections 25-8a to e of the General Statutes, as amended;

(5) Discharges into waters of the state, pursuant to Section 25-54i of the General Statutes, as amended.

(Effective February 25, 1974)

Sec. 22a-39-4.3.b. Submission and processing of applications

Each application to undertake an activity specified in Section 4.3.a of these regulations shall be submitted to the Commissioner and processed in accordance with the statutes, regulations and procedures which are applicable to the proposed activity.

(Effective February 25, 1974)

Sec. 22a-39-4.3.c. Submission of application to local wetlands agency

Except as provided in Section 4.4 of these regulations, if any application submitted pursuant to Section 4.3.b of these regulations includes a regulated activity as defined by Section 4.2 of these regulations, the Commissioner shall direct the applicant to submit such portion of the application to the appropriate local inland wetlands agency.

(Effective February 25, 1974)

Sec. 22a-39-4.3.d. Local agency to direct certain applicants to commissioner

If a local inland wetlands agency receives an application to undertake an activity specified in Section 4.3.a of these regulations, the local inland wetlands agency shall in writing direct the applicant to apply to the Commissioner for the required license. The local wetlands agency may, in its discretion, review the remaining portions of the application, or may deem such application incomplete until the Commissioner issues a final decision concerning any related application subject to his jurisdiction.

(Effective February 25, 1974)

Sec. 22a-39-4.3.e. Permits granted by commissioner to be binding on local agency

Any permit granted or denied by the Commissioner shall be binding upon the local inland wetlands agencies as to matters within the Commissioner's jurisdiction.

(Effective February 25, 1974)

Sec. 22a-39-4.3.f. Commissioner may consult local agency

Upon receipt of any application to conduct an activity which will affect a wetland or water course, the Commissioner may submit a copy of the application to the local inland wetlands agency in any affected municipality for review and comment. The failure to receive a written reply shall not delay a public hearing or prejudice the final decision.

(Effective February 25, 1974)

Sec. 22a-39-4.4. Exclusive jurisdiction of commissioner

The Commissioner shall license and maintain exclusive jurisdiction over regulated activities as defined in Section 4.2 of these regulations to be undertaken by any department, agency or instrumentality of the State of Connecticut.

(Effective February 25, 1974)

Sec. 22a-39-4.5. Issuance of permit by commissioner before July 1, 1974

After the effective date of these Regulations, but before July 1, 1974, the Commissioner may issue such permits as he deems necessary to implement the purposes of the Act and of these Regulations.

(Effective February 25, 1974)

Sec. 22a-39-4.6. Boundary maps to be established

The local inland wetlands agency or the Commissioner shall establish or amend area boundary maps in accordance with the procedures of subsections f and g of Section 22a-39 of the General Statutes. Such maps shall be on file in the offices of the municipal clerks and at the Department, and titled ''Designated Inland Wetlands and Water Courses of the . . . . . (City or town) of . . . . . (Name of Municipality).''

(Effective February 25, 1974)

Sec. 22a-39-4.7. Disputation of designations

Wetlands and Watercourses—Inland wetlands and water courses are defined in Sections 2 (18) and 2 (19) of these regulations.

a. If any person disputes the designation or the failure to designate any wetland or water course as a regulated area, such person may be required to produce such information as the local inland wetlands agency or the Commissioner deems necessary to permit an informed decision.

b. To meet the burden of proof for wetlands exemption under subsection (a), the petitioner may be directed to present documentation by a soil scientist that the wetland in question, or a portion of it, does not have a soil type classified by the National Cooperative Soils Survey as poorly drained, very poorly drained, alluvial, or flood plain.

(Effective February 25, 1974)

Sec. 22a-39-5. Application procedure

Sec. 22a-39-5.1.a. Where applications to be submitted

Any person wishing to carry out a regulated activity shall submit an application to the local inland wetlands agency. After June 30, 1974, if there is no such operating wetlands agency within the municipality, such person shall apply to the Commissioner.

(Effective February 25, 1974)

Sec. 22a-39-5.1.b. Complete application

No application submitted to the Commissioner shall be deemed complete unless it shall be in such form and contain such information as the Commissioner deems necessary for a fair determination of the issues. The Commissioner shall inform all applicants of such necessary information.

(Effective February 25, 1974)

Sec. 22a-39-5.1.c. Five copies of information required

Written information and maps required by the Commissioner shall be furnished in no fewer than five (5) copies.

(Effective February 25, 1974)

Sec. 22a-39-5.2. Information required on applications

All applications to the Commissioner shall include the following information in writing on a form provided by him.

a. The applicant's name, home and business addresses, and telephone numbers;

b. The owner's name (if applicant is not the owner of the property), home and business addresses, telephone numbers, and written consent to the proposed activity set forth in the application;

c. Applicant's interest in the land;

d. The geographical location of the property which is to be affected by the proposed activity, including a description of the land in sufficient detail to allow identification of the properties on the Inland Wetlands and Water Courses Map;

e. Purpose and description of the proposed activity;

f. A site plan;

g. Names of adjacent property owners;

h. Required additional information.

(Effective February 25, 1974)

Sec. 22a-39-5.3. Summary ruling

If the Commissioner finds that a proposed activity is a regulated activity not involving significant impact or major effect on the inland wetland or water course as defined in Section 2 of these regulations, he may allow the activity with or without conditions or limitations. The Commissioner, after full review of the considerations set forth in Sections 6.1.d through 6.1.h and other pertinent factors, shall issue a permit with or without conditions or limitations.

(Effective February 25, 1974)

Sec. 22a-39-5.4. Plenary rulings

If the Commissioner finds that the activity applied for does or may involve a significant impact or major effect on a wetland or water course, he may request additional information which may include but is not limited to:

a. **Site plan**—a map of the proposed use and the property which will be affected, drawn by a licensed surveyor, professional engineer, or professional architect, registered in the State of Connecticut or in an adjoining state, or by such other person acceptable to the Commissioner. The map shall be at a scale to be determined by the Commissioner. Detailed information to be included on this site plan shall be requested by the Commissioner according to his evaluation requirements.

b. **Soil sample data**—if the parcel lies within or partly within an area containing poorly drained, very poorly drained, alluvial, and/or flood plain soils, the data shall show precisely where each specific soil type is found. Soil types identified must be consistent with the categories established by the National Cooperative Soil Survey of the U.S. Soil Conservation Service.

c. **Biological information**—The applicant may be required to submit 1) an evaluation of the extent of the presence of plant species commonly associated with water courses, and 2) an analysis of the probable effect of his proposed activity upon the plant and animal ecosystem.

d. **Water course characteristics**—if the proposed activity may affect a water course lying within, partly within, or flowing through or adjacent to the affected property, the applicant may be required to submit information relative to the present character and the projected impact of the proposed activity upon the water course.

e. **Analysis of material to be deposited**—the applicant may be required to describe any materials to be deposited on the affected property in terms of volume, composition, and the possibility of erosion or leaching from deposited materials. The applicant may also be required to estimate the probable environmental impact of the deposition of materials on the affected wetlands or water courses.

f. A description of the proposed construction or the erection of structures on the affected property, including blueprints, engineering and architectural plans or designs. Such description should include the purposes of such construction or activity.

g. A list of other property owners whose rights or interests may be affected by the proposed activity.

(Effective February 25, 1974)

Sec. 22a-39-5.5. Public hearing may be held

If the Commissioner finds, on the basis of the evidence before him, that a regulated activity is involved which may have significant impact or major effect on a wetland or water course, he may docket such proposal for public hearing.

(Effective February 25, 1974)

Sec. 22a-39-5.6.e. Public hearings

All public hearings shall commence not sooner than thirty (30) days nor later than sixty (60) days after the receipt of a complete application. Notice of the hearing shall be published at least once not more than thirty (30) days and not fewer than ten (10) days before the date set for the hearing in a newspaper having a general circulation in each town where the affected wetlands or water courses are located. All applications, maps, and documents relating to this hearing shall be open for public inspection at the Office of the Clerk of the municipality wherein the affected inland wetland or water course is located, or at the Department. Notices of hearings shall be sent to the applicant, adjacent property owners, all known interested parties and groups, and to chief executive officers of the town wherein the wetland or water course lies.

(Effective February 25, 1974)

Sec. 22a-39-5.7.a. Review by county soil and water conservation district

The Commissioner may submit one copy of the application to the County Soil and Water Conservation District for review. Such submission shall be made upon the receipt of a complete application, but failure to receive a written review from the Soil and Water Conservation District shall not delay a public hearing or prejudice the final decision.

(Effective February 25, 1974)

Sec. 22a-39-5.7.b. Review by conservation commission

The Commissioner may submit one copy of the application to the Conservation Commission of the municipality wherein the wetland is located for review. Such submission shall be made upon receipt of a complete application, but failure to receive a written reply from the Conservation Commission shall not delay a public hearing or prejudice the final decision.

(Effective February 25, 1974)

Sec. 22a-39-5.7.c. Review by conservation or planning commissions of adjoining municipality

The Commissioner may submit one copy of the application to the Conservation Commission or Planning Commission in any municipality whose border lies within five hundred (500) feet of any wetland or water course that may be affected by the proposed activity. Such submission shall be made upon receipt of a complete application, but failure to receive a written reply shall not delay a public hearing or prejudice the final decision.

(Effective February 25, 1974)

Sec. 22a-39-6. Rendering a decision

Sec. 22a-39-6.1. Considerations for decision

The Commissioner shall, consistent with applicable requirements of Sections 4-166 to 185 of the General Statutes, as amended, consider the following in making his final decision on a permit application:

a. All evidence offered at any public hearing;

b. Any reports from other commissions and/or federal or state agencies, including the Soil and Water Conservation District and the Connecticut Department of Environmental Protection;

c. Additional requested information;

d. All relevant facts and circumstances, including but not limited to the following:

(i) The environmental impact of the proposed action, including the effects of the inland wetland's and water course's natural capacity to support desirable biological life, to prevent flooding, to supply water, to control sediment, to facilitate drainage, and to promote public health and safety.

(ii) The alternatives to the proposed action including a consideration of alternatives which might enhance environmental quality or have a less detrimental effect, and which could feasibly attain the basic objectives of the activity. This should include but is not limited to the alternative of taking no action, or postponing action pending further study; the alternative of requiring actions of different nature which would provide similar benefits with different environmental impacts, such as using a different location for the activity.

(iii) The relationship between the short-term uses of the environment and the maintenance and enhancement of long-term productivity, including consideration of the extent to which the proposed activity involves trade-offs between short-term environmental gains at the expense of long-term losses, or vice versa, and consideration of the extent to which the proposed action forecloses future options.

(iv) Irreversible and irretrievable commitments of resources which would be involved in the proposed activity. This requires recognition that the inland wetlands and water courses of the State of Connecticut are an indispensable and irreplaceable but fragile natural resource, and that these areas may be irreversibly destroyed by deposition, filling, and removal of material, by the diversion or obstruction of waterflow, and by the erection of structures and other uses.

(v) The character and degree of injury to, or interference with, safety, health, or the reasonable use of property which would be caused or threatened. This includes recognition of potential damage from erosion, turbidity, or siltation, loss of fish and other beneficial aquatic organisms, wildlife and vegetation; the dangers of flooding and pollution; and destruction of the economic, aesthetic, recreational and other public and private uses and values of wetlands and water courses.

(vi) The suitability of such action to the area for which it is proposed. This requires the agency to balance the need for the economic growth of the state and the use of its land, with the need to protect its environment and ecology for the people of the state and the benefit of generations yet unborn.

e. Measures which would mitigate the impact of the proposed activity and may be imposed as conditions of the permit. Such measures include the availability of further technical improvements or safeguards which could feasibly be added to the plan or action to avoid the reduction of the wetland's or water course's natural capacity to support desirable biological life, prevent flooding, supply water, control

sedimentation and/or prevent erosion, assimilate wastes, facilitate drainage, and provide recreation and open space.

(Effective February 25, 1974)

Sec. 22a-39-6.2.a. When commissioner must render decision

In the absence of a public hearing, the Commissioner shall render a final decision within ninety (90) days from the receipt of a complete application. The Commissioner shall notify the applicant by certified mail of his decision within ten (10) days of the date of the decision and the Commissioner shall cause notice of his decision to be published in a newspaper having a general circulation in the municipality wherein the regulated area lies.

(Effective February 25, 1974)

Sec. 22a-39-6.2.b. When commissioner must render decision after public hearing

Action shall be taken on applications within forty-five (45) days after certification of a transcript of the public hearing. The Commissioner shall inform the applicant and any other parties of his decision in granting a permit with or without conditions, or in denying a permit, by certified mail within ten (10) days of the date of such decision.

(Effective February 25, 1974)

Sec. 22a-39-7. The permit

Sec. 22a-39-7.1. Written opinion required

At the time of granting a permit, granting a permit with conditions or limitations, or denying a permit following a public hearing, the Commissioner shall issue a written opinion presenting his reasons.

(Effective February 25, 1974)

Sec. 22a-39-7.2. Modification and resubmission of denied application

The Commissioner may deny a permit with or without prejudice. If a permit is denied with prejudice, the application shall not be resubmitted for one year following the date of such denial. If a permit is denied without prejudice, the applicant may modify, amend or correct his proposal. The rejection of a modified proposal shall be equivalent to the denial of an application for the purposes of Section 10 of these regulations.

(Effective February 25, 1974)

Sec. 22a-39-7.3. Modification of application granted with conditions

If a permit is granted with conditions or limitations, and the applicant disputes such conditions or limitations, he may modify, amend or correct his proposal. Rejection of a modified, amended or corrected proposal shall be equivalent to the denial of an application for the purposes of Section 10 of these regulations.

(Effective February 25, 1974)

Sec. 22a-39-7.4. Initiation of activity to be within one year

Initiation of activity under a permit shall be within one year of the granting of the permit, unless the time period is extended by the Commissioner.

(Effective February 25, 1974)

Sec. 22a-39-7.5. Assignment of permits

No permit may be assigned or transferred without the written consent of the Commissioner.

(Effective February 25, 1974)

Sec. 22a-39-8. Other permits and licenses

Nothing in these regulations shall obviate any requirement for the applicant to obtain any other permit or license required by law or regulation of the Government of the United States or of the State of Connecticut or any political subdivision is solely the responsibility of the applicant.

(Effective February 25, 1974)

Sec. 22a-39-9. Enforcement

Sec. 22a-39-9.1. Entrance onto private property

In the performance of his duties under the Act, and under Section 22a-5 (d) of the General Statutes, the Commissioner or his designated agent pursuant to Section 22a-6 (d), may enter at all reasonable times upon any public or private property, except a private residence, for the purpose of inspection and investigation to ascertain possible violations of these regulations.

(Effective February 25, 1974)

Sec. 22a-39-9.2. Issuance of orders

If the Commissioner finds that any person is maintaining any facility or condition which reasonably can be expected to impair, alter or destroy the wetlands and water courses of the State or which is creating or reasonably can be expected to create a source of pollution to the wetlands and water courses of the State, he may issue an order to such person maintaining such facility or condition to take the necessary steps to correct such facility or condition.

(Effective February 25, 1974)

Sec. 22a-39-9.3. Appeal of order

Each order issued pursuant to Section 9.2 shall be sent by certified mail, return receipt requested, to the subject of such order and shall be deemed issued upon deposit in the mail. Any person aggrieved by any such order may, within thirty (30) days from the date such order is sent, request a hearing before the Commissioner. After such hearing the Commissioner shall consider the facts presented to him and shall revise and resubmit the order to the person or inform the person that the previous order has been affirmed. All such orders and hearings shall be issued and held in conformance with Sections 4-166 to 185 of the General Statutes, as amended, and with The Rules of Practice of the Dept. of Environmental Protection adopted pursuant to § 2 (a) of the P.A. 854 of 1971, as amended. The request for a hearing as provided for in this section shall be a condition precedent to the taking of an appeal under the provisions of Section 10 of these regulations. The Commissioner may, after the hearing provided for in this section, or at any time after the issuance of his order, modify such order by agreement or extend the time schedule therefor if he deems such modification or extension to be advisable or necessary. Any modification or extension shall be deemed to be a revision of an existing order and shall not constitute a new order.

(Effective February 25, 1974)

Sec. 22a-39-9.4. Penalties for violation of regulations

Any person who commits, takes part in, or assists in any violation of any provision of these regulations shall be subject to the penalties provided in Section 22a-44 of the General Statutes, and to such other penalties as the law may provide. If the Commissioner determines that any person is engaging in any regulated activity without a proper permit, or is exceeding the conditions or limitations placed on his permit or the scope of work as set forth in the application, or has obtained a permit through deception or through inaccurate information as to either the activity or its environmental impact, or has engaged or is engaging in any other violation of these regulations or the Act, the Commissioner may:

a. Issue a cease and desist order to such person, pursuant to Section 22a-7 of the General Statutes, as amended, directing him to halt any and all regulated activities or other violations;

b. Revoke or suspend any permit whose conditions or limitations have been exceeded, or which was secured through deception or through inaccurate information as to either the scope of its activity or its environmental impact;

c. Bring an action pursuant to Section 22a-44 of the General Statutes, as amended; or

d. Bring an action pursuant to Public Act No. 73-665 or any regulations promulgated thereunder.

(Effective February 25, 1974)

Sec. 22a-39-9.5. Suspension or revocation of permits

In the event that the Commissioner shall suspend or revoke a permit pursuant to Section 9.4.b above, the applicant shall be notified of the Commissioner's decision by certified mail within five (5) days of the date of the decision and the Commissioner shall cause notice of his order in revocation or suspension of a permit to be published in a newspaper having general circulation in the municipality wherein the wetland or water course lies. Before such suspension or revocation may take effect, the Commissioner shall afford the applicant opportunity to show compliance with all lawful requirements for retention of the permit. However, if the Commissioner finds that public health, safety or welfare imperatively requires emergency action, and incorporates a finding to that effect in his order, he may order summary suspension of a license pending proceedings for revocation or other action.

(Effective February 25, 1974)

Sec. 22a-39-9.6. Monies to be maintained in separate account

All monies collected pursuant to this section shall be maintained in a separate account and shall be used by the Commissioner to restore the affected wetlands or water courses to their condition prior to violation, wherever possible.

(Effective February 25, 1974)

Sec. 22a-39-9.7. Introduction of evidence

All parties may, subject to the ruling of the Commissioner, request summonses and examinations of witnesses; cross-examine witnesses; introduce records, papers, documents, or other evidence into the record; and submit oral arguments and file briefs for the purpose of showing compliance with requirements for retention of a permit and for the purpose of showing the absence of any violation.

(Effective February 25, 1974)

Sec. 22a-39-9.8. Other remedies not excluded

Nothing in these regulations shall be taken as limiting or excluding such other remedies as are available to the Commissioner for the protection of wetlands and water courses.

(Effective February 25, 1974)

Sec. 22a-39-10. Appeals

Any person aggrieved by any regulation, order, decision or action made by the Commissioner pursuant to these regulations and/or the General Statutes of Connecticut may appeal to the court of common pleas in and for the county where the land affected is located within fifteen (15) days after publication of such regulation, order, decision, or action. All appeals shall follow the procedure outlined in Section 22a-43 of the General Statutes, as amended.

(Effective February 25, 1974)

Sec. 22a-39-11. Conformity of local wetlands agency regulations

Sec. 22a-39-11.1. Submission of local regulations to commissioner

All regulations, including regulated area boundary maps, promulgated or amended by local wetlands agencies, pursuant to the Act, shall be submitted to the Commissioner not later than ten (10) days after their adoption.

(Effective February 25, 1974)

Sec. 22a-39-11.2. Conformity of local regulations

The Commissioner shall examine such regulations, including maps and amendments, to determine their conformity with the Act and with these regulations in terms of a) procedural safeguards, b) completeness of wetland and water course coverage, c) adequacy of enforcement machinery and information gathering procedures, and d) substantial adherence to the policies and goals of the Act.

(Effective February 25, 1974)

Sec. 22a-39-11.3. Notice of nonconformance

In the event that the Commissioner shall find any part of such local inland wetlands agency regulation not in conformity, the Commissioner shall issue a notice of nonconformance which shall include:

a. the reasons for holding any part to be nonconforming;

b. the section or sections whose operation and effect shall be suspended until they shall be amended and resubmitted;

c. the extent to which the Commissioner shall exercise jurisdiction over the municipal wetlands and water courses, for their protection, in the interval between the issuance of a notice of nonconformance and the resubmission of amended regulations, including boundary maps.

(Effective February 25, 1974)

Sec. 22a-39-11.4.a. Amendment of nonconforming regulations

The local wetlands agency shall, pursuant to the provisions for adopting and amending regulations contained in the Act, initiate proceedings to amend such nonconforming regulations within twenty (20) days of the receipt of a notice of nonconformance.

(Effective February 25, 1974)

Sec. 22a-39-11.4.b. Jurisdiction where local regulations disapproved

Upon disapproval of any municipal regulations, the Commissioner shall assume jurisdiction over those portions of such municipality's regulations as may be necessary to assure continuity of wetland and water course regulation in such municipality. This jurisdiction shall cease upon approval of the municipality's regulations by the Commissioner.

(Effective February 25, 1974)

Sec. 22a-39-11.5.a. Where commissioner does not issue notice

Failure of the Commissioner to issue a notice of nonconformance within sixty (60) days of the receipt of such regulations, maps, or amendments shall be taken as approval of such regulations, except as provided in Section 11.5.b of these regulations.

(Effective February 25, 1974)

Sec. 22a-39-11.5.b. Final written approval

If municipal regulations were not submitted to and granted approval by the Commissioner in a preliminary form prior to adoption, they shall not become effective until granted final written approval by the Commissioner.

(Effective February 25, 1974)

Sec. 22a-39-11.6. Local regulations approved before effective date of these regulations

All municipal maps and regulations approved by the Commissioner before the effective date of these regulations shall be deemed sufficient to satisfy the requirements of the Act and these regulations. Such regulations shall be deemed fully operative as of their effective date.

(Effective February 25, 1974)

Sec. 22a-39-11.7. Jurisdiction of municipality

After July 1, 1974, any municipality which designates a local wetlands agency and adopts regulations shall, upon approval of such regulations by the Commissioner, exercise jurisdiction over regulated activities.

(Effective February 25, 1974)

Sec. 22a-39-11.8. Reports to commissioner

All enforcement activities undertaken by a municipality and all appeals involving a municipality which pertain to the wetlands and water courses of the State shall be reported, on a form supplied by the Commissioner, to the Commissioner within fifteen (15) days of the commencement of such action.

(Effective February 25, 1974)

Sec. 22a-39-12. Bond and insurance

Sec. 22a-39-12.1. Bond may be required

The applicant, upon approval of the license, and at the discretion of the Commissioner, may be required to file a performance bond or other adequate security in an amount and with sureties and in a form approved by the Commissioner.

(Effective February 25, 1974)

Sec. 22a-39-12.2. Condition for bond

The bond and sureties shall be conditioned on substantial compliance with all provisions of these regulations and conditions imposed on license approval.

(Effective February 25, 1974)

Sec. 22a-39-12.3. Public insurance

The applicant may be directed to certify that he has public insurance against liability which might result from the proposed operation or use covering any and all damages which might occur within three (3) years of completion of such operations, in an amount to be determined by the Commissioner commensurate with the projected operation.

(Effective February 25, 1974)

Sec. 22a-39-13. Conflict and severance

Sec. 22a-39-13.1. Conflict with other regulations

Where there is a conflict between the provisions of these regulations and those of any other regulation administered by the Department, the provisions of the regulation which imposes the most stringent standards for the use of the wetland or water course shall govern.

(Effective February 25, 1974)

Sec. 22a-39-13.2. Invalidity of certain parts of regulations

The invalidity of any word, clause, sentence, section, part or provision of these regulations shall not affect the validity of any other part which can be given effect without such invalid part or parts.

(Effective February 25, 1974)

Sec. 22a-39-14. Reporting requirements for municipal inland wetland agencies

(a) Each inland wetland and watercourses agency established pursuant to section 22a-42 of the General Statutes, as amended, shall report the following actions to the Commissioner on a form provided by the Department:

(1) permits issued;
(2) permits denied;
(3) enforcement notices and orders;
(4) map amendments; and
(5) jurisdictional rulings.

(b) The information reported to the Commissioner shall include, but is not limited to:

(1) name of the town and reporting agency;
(2) reporting period;
(3) action category;
(4) date action was taken;
(5) location of activity;
(6) name for project site;
(7) name of applicant, petitioner or violator;
(8) activity category;
(9) activity purpose;
(10) public hearings;
(11) permit duration;

(12) area of wetland soils and watercourse altered;
(13) area of wetland and watercourse created;
(14) lineal feet of brook, river or stream altered;
(15) acreage of lake, pond or similar open water body filled or dredged;
(16) total land area of the project including uplands and wetlands and watercourses;
(17) soil classifications; and
(18) name of the person(s) who completed the form.

(c) The location of the action reported shall be outlined or pinpointed on an eight and one half by eleven inch (8½ by 11 inch) photocopy of a portion of the USGS quadrangle map for the area in question. The Commissioner shall provide a single set of U.S. Fish & Wildlife Service National Wetland Inventory Maps to each municipal inland wetland agency for this purpose.

(d) The municipal inland wetland agency may require applicants or petitioners for map changes to complete appropriate portions of the form as part of the application filing.

(e) The inland wetland agency shall ensure that the information provided on reporting forms is accurate and that it reflects the final action of the agency.

(f) Completed reporting forms for actions taken during a calendar month shall be mailed by the municipal wetland agency to the Commissioner at the address noted on the form no later than the 15th day of the following month.

(g) The Commissioner may revise the inland wetland activity reporting form and may issue instructions or guidelines to help municipal inland wetland agencies complete and file them in a timely fashion.

(Effective December 29, 1988)

Sec. 22a-39-15. Payments to the state for acting on inland wetlands and watercourses permit applications

(a) After July 1, 1988 any applicant for an inland wetlands and watercourses permit filed with the commissioner pursuant to section 22a-39 (i) of the General Statutes for activity in a town which has not established an inland wetlands and watercourses agency pursuant to section 22a-42 of the General Statutes, shall pay the state an application fee based on the fee schedules established in subsection (i) of this section.

(b) Any municipality whose jurisdiction under sections 22a-36 through 22a-45 of the General Statutes has been revoked by the Commissioner, shall pay the state for its acting on applications for inland wetland or watercourse activity in such municipality in accordance with the fee schedules established in subsection (i) of this section. All fees payable to the state by the municipality shall be billed to the municipality after final action has been taken on the application. Payment shall be made within 90 days.

(c) If the Commissioner revokes municipal jurisidiction, any fees due the municipality from applicants for inland wetland activity under the municipal inland wetland regulations, shall instead be paid by the applicant to the state. All such fees shall be paid at the time the application is filed with the Commissioner.

(d) In the case of inland wetland applications pending before a municipality whose jurisdiction has been revoked, the municipality shall refund to the applicant any application fees submitted to it with instruction to remit such fees to the state pursuant to subsection (c) of this section.

(e) Application fees are not refundable.

(f) No application shall be deemed complete unless the correct application fee required from the applicant is paid in full or unless a waiver has been granted to the applicant by the Commissioner pursuant to subsection (j) of this Section.

(g) **Method of Payment.** All fees required by these regulations shall be submitted to the Commissioner by certified check or money order made payable to the ''Treasurer of the State of Connecticut'' provided payments by municipalities may be made by the draft of such municipality.

(h) **Definitions:**

''residential uses'' means activities carried out on property developed for permanent housing or being developed to be occupied by permanent housing on an individual building lot or as part of a subdivision of land for housing.

''commercial uses'' means activities carried out on property developed for industry, commerce, trade, recreation, or business or being developed to be occupied for such purposes, for profit or nonprofit.

''other uses'' means activities other than residential uses or commercial uses.

(i) **Fee Schedule.** Application fees shall be based on the following schedule:

(1) Regulated Uses

Residential uses on single lot $400.00
plus fee from schedule A

Commercial uses of single lot. $500.00
plus fee from schedule A

Subdivision. $200.00

Plus:

(A) $45.00 for each proposed subdivision lot whether or not such lots contain wetlands or watercourses, and

(B) $110.00 for each lot on which a regulated activity is proposed, and

(C) fee from schedule A

All other uses 170.00
plus fee from schedule A

(2) Significant Activity Fee $525.00

(A) A significant activity fee shall be paid if the application involves an activity upon a wetland or watercourse which will have or is likely to have a ''significant impact or major effect'' as these terms are defined in section 22a-39-2 of the Inland Wetlands and Water Courses Regulations of the Connecticut Department of Environmental Protection and a public hearing is required pursuant to section 22a-29 (k) of the General Statutes.

(B) If the Commissioner waives the requirement for the public hearing and subsequently holds a public hearing solely as a result of a petition pursuant to section 22a-39 (k) of the General Statutes, the significant activity fee shall be waived, except in any case where municipal jurisdiction to regulate wetlands and watercourses has been revoked in accordance with section 13 of Public Act 87-533, a $525.00 public hearing fee shall be paid by the municipality in which the regulated activity is proposed to take place.

(3) Post Permit Inspection $150.00

A post permit inspection fee of $150.00 shall be paid prior to the issuance of any permit. In any case where additional scheduled inspections are required, the commissioner shall determine the number of, and schedule for, post permit inspections and provide the applicant an opportunity to contest the additional fees prior to the issuance of the permit. The fee for such additional inspections shall be $150.00 each.

(4) Modification of Existing Permit $25.00

This fee applies to the transfer of a permit to a new permittee, minor plan revisions within the scope of the original application and permit, modification of specific terms or conditions imposed as part of the permit, and similar administrative actions. There shall be no fee for correcting typographical or other errors which are the responsibility of the Department of Environmental Protection.

SCHEDULE A. The regulated area in schedule A is the total area of wetlands and watercourses upon which a regulated activity is proposed. To calculate the fee, round up to the next highest 1000 square feet (example: 2340 square feet is rounded up to 3000 square feet).

SQ. Ft. Regulated Area	Fee/1000 Sq. Ft. Regulated Area
Less than 2,000	$18.00 per 1000 square feet
2,000 to 50,000	$36.00 plus $12.00 per 1000 square feet
More than 50,000	$600.00 plus $6.00 per 1000 square feet

(j) **Waiver.** The applicant may petition the Commissioner to waive, reduce or allow delayed payment of the fee required by this section. Such petitions shall be in writing and shall state fully the facts and circumstances the Commissioner should consider in his or her determination under this section. The Commissioner may waive all or part of the application fee if:

(1) the activity applied for would clearly result in a subtantial public benefit to the environment or to the public health and safety and the applicant would reasonably be deterred from initiating the activity solely or primarily as a result of the amount of the application fee, or

(2) the amount of the application fee is clearly excessive in relation to the cost to the State for reviewing and processing the application.

The Commissioner shall state upon the record the basis for all actions under this subsection.

(Effective December 29, 1988)

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Inland Wetlands

Sec. 22a-42d-1. Revocation and reinstatement of municipal authority to regulate inland wetlands

(a) In evaluating whether a municipal inland wetland agency is performing its duties pursuant to section 22a-42 of the General Statutes, as amended, the Commissioner shall consider the standards and criteria established in this section.

(b) If the Commissioner finds that two or more of the following conditions have occurred after the effective date of these regulations, or that any one of the following conditions has occurred more than once after that date, a municipal wetland agency shall be deemed to have consistently failed to perform its duties under section 22a-42 of the General Statutes, as amended, and the Commissioner may revoke the authority of the municipality to regulate inland wetlands under said section.

(1) Failure to meet or meet in a quorum at regularly scheduled meetings, as established in the municipal enabling ordinance, to consider pending permit applications, pending petitions for map or regulation changes or any other pending business pursuant to the responsibilities of the agency prescribed by sections 22a-36 through 22a-45 of the General Statutes, as amended.

(2) Failure to investigate and initiate enforcement proceedings on any violation of municipal wetland regulations adopted pursuant to section 22a-42a of the General Statutes, as amended, within forty-five (45) days of (A) discovery of such violation by a representative of the agency, or (B) receipt by the agency of written notice of the violation from a person who states the nature and location of the violation; or failure thereafter to pursue such enforcement action with due diligence.

(3) Failure to apply the decision making criteria and standards for regulating, licensing, and enforcing the provisions of sections 22a-36 through 22a-45 of the General Statutes, as amended, established in adopted municipal regulations or prescribed in section 22a-41 of the General Statutes, as amended.

(4) Failure to initiate the adoption of amendments to municipal inland wetland regulations within sixty-five (65) days of receipt by the agency of a notice of nonconformity issued by the Commissioner pursuant to section 22a-39 of the General Statutes, as amended, or failure thereafter to pursue adoption of those amendments with due diligence.

(5) Failure to file reports with the Commissioner as required by section 22a-39 of the General Statutes, as amended.

(6) Failure to have pending applications for permits and petitions for regulation changes, including map amendments, available for public inspection at reasonable times prior to the meeting during which action is to be taken on them by the wetland agency.

(7) Failure to maintain complete administrative records of municipal wetland agency actions on permit applications, complaints regarding violations, enforcement actions and petitions for changes in the municipal inland wetland regulations or maps.

(8) Failure of any commission member to disqualify himself or herself and to withdraw from any matter before the municipal wetland agency in which the commission member is directly or indirectly interested in a personal or financial sense, or failure to state that fact on the record pursuant to section 22a-42 (c) of the General Statutes.

(c) The Commissioner may issue an advisory letter to any inland wetland agency informing the agency of any complaint received by the Department of Environmental Protection, investigation made or planned by the Department, requesting information

about agency proceedings or actions, or outlining corrective actions to be considered or taken by the municipal wetland agency in order to avoid action under subsection (d) of this section. The purpose of this subsection is to foster expeditious correction of administrative or procedural problems and to avoid, where possible, the initiation of formal revocation proceedings. The advisory letter shall be sent certified mail, return receipt requested, to the wetland agency at its official mailing address. A copy of the advisory letter shall also be mailed to the chief executive officer of the municipality.

(d) The Commissioner shall revoke municipal jurisdiction in accordance with the following procedures:

(1) Prior to the public hearing on revocation, the Commissioner shall send a notice to the inland wetlands agency, by certified mail, return receipt requested, asking the wetland agency to show cause, within thirty (30) days, why its authority to regulate wetlands and watercourses under section 22a-42 of the General Statutes should not be revoked.

(2) The notice to show cause shall be effective upon its mailing by the Department to the wetland agency at its official mailing address. A copy of the show cause notice shall be mailed to the chief executive officer of the municipality.

(3) The show cause notice shall summarize the reasons for the proposed revocation and the circumstances under which regulatory authority may be reinstated, and may include the date, place and time for a public hearing to consider revocation of municipal jurisdiction, or that a determination to proceed to a public hearing has been deferred pending the Commissioner's review of the wetland agency's answer to the notice.

(4) If revocation of municipal authority is deemed necessary, a public hearing on proposed revocation of jurisdiction shall be held no sooner than 35 days from the date the show cause notice was mailed, or in the case where the hearing has been deferred pending the answer of the wetland agency, no sooner than 35 days from the date the notice of the hearing on proposed revocation was mailed.

(5) The public hearing on proposed revocation of municipal jurisdiction shall be conducted, and the decision to revoke or not revoke municipal jurisdiction shall be made, in accordance with section 22a-3a-1 (e) of the Regulations of Connecticut State Agencies.

(6) The Commissioner shall send the notice of revocation of inland wetland jurisdiction to the wetland agency, certified mail, return receipt requested. The notice shall state the reasons for the revocation and the circumstances under which regulatory authority may be reinstated. Notice that the jurisdiction of the wetland agency has been revoked and that the Commissioner has jurisdiction over the inland wetlands and watercourses in the municipality that authorized the agency, shall be published in a newspaper of general circulation in such municipality within thirty (30) days after mailing the notice of revocation to the agency.

(e) The circumstances under which municipal wetland agency jurisdiction may be reinstated which are set forth in the Commissioner's notice of revocation may include, but are not necessarily limited to:

(1) demonstration that the individual commission members are aware of the standards established in subsection (b) of this section and that measures will be implemented, including providing legal counsel, to ensure that the standards will not be violated;

(2) demonstration that the wetland agency members are receiving or will be receiving training on wetlands and watercourses regulation;

(3) demonstration that the agency has established a wetland agent or other person to manage wetland agency affairs; or

(4) demonstration that the potential for conflict of interest or decision making bias within the agency due to the personal or financial interests of individual commissioners is minimized by appointments of persons from different backgrounds or occupations;

(f) When the municipal jurisdiction to regulate wetlands is reinstated, the Commissioner shall cause notice of such reinstatement to be published in a newspaper of general circulation in the municipality within thirty (30) days of mailing the notice to the agency.

(Effective December 29, 1988)

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Use of Pesticides

Sec. 22a-49-1. Use of forms

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Pesticide Registration and Classification

Sec. 22a-50-1. Definitions

(a) The definition of terms used in these regulations shall be consistent with the definitions in Section 22a-47, Connecticut General Statute.

(b) The following terms not defined in Section 22a-47, Connecticut General Statutes, are defined as follows:

(1) aquatic use — materials applied on or in water except in self contained artificial structures such as cooling towers and swimming pools.

(2) bioaccumulation — the concentration of a substance in an organism which exceeds those concentrations found in the surrounding environment.

(3) breakdown product — a chemical substance resulting from the transformation of a pesticide by physical, chemical, electromagnetic, or biological means.

(4) carcinogenesis — the generation of malignant tumors in animals.

(5) Dermal LD_{50} — the amount of material, expressed as mg substance/kg test animal or ppm, placed on the skin that will kill 50% of the number of test animals.

(6) food chains — the numerous pathways by which matter and energy are exchanged within an ecosystem.

(7) Inhalation LC_{50} — that concentration, expressed as mg substance/1. air or ppm in the air, that would be lethal to 50% of the test population of animals within a specific time and under specified test conditions.

(8) mutagenesis — the generation of genetic changes in animals or somatic changes in subsequent generations of animals.

(9) Oral LD_{50} — the amount of material expressed as mg substance/kg test animal or ppm absorbed through the digestive tract that will kill 50% of the number of test animals.

(10) ''Ready-to-Use'' — a pesticide as sold to the user, registered and labelled for immediate application without further dilution.

(11) synergism — cooperative action of two or more agents such that the joint effect if greater than the sum of the single effects taken independently.

(12) teratogenesis — the generation of congenital defects in animals, which are ordinarily non-hereditable.

(13) use dilution — the material as diluted according to label directions for an application.

(Effective February 14, 1975)

Sec. 22a-50-2. General use classification

Pesticides shall be classified for general use unless they may be classified restricted based upon the criteria in these regulations.

(Effective February 14, 1975)

Sec. 22a-50-3. Restricted use classification

When the Commissioner determines, after review of data available to him with regard to, but not necessarily limited to, the factors listed in Sections 22a-50-4 and 22a-50-5 that the use of a pesticide may cause unreasonable adverse effects on the environment he shall classify the use restricted.

(Effective February 14, 1975)

Sec. 22a-50-4. Classification criteria

When reviewing a pesticide for its classification the Commissioner shall consider a number of factors, including but not limited to the following:

(a) human fatalities
(b) effects of toxicological significance including but not limited to, neurological or behavioral alterations and liver changes
(c) mutagenesis
(d) teratogenesis
(e) carcinogenesis
(f) severe skin or eye irritation
(g) persistence of the pesticide or break-down product
(h) bioaccumulation of the pesticide or break-down product
(i) widespread or common practice which runs contrary to the intent of label instructions and prohibitions
(j) risk of contaminating food chains and thereby causing chronic, delayed or secondary poisoning
(k) the extent to which ingredients or break-down products leach from the soil and/or drift as vapors from the target area
(*l*) synergistic effects
(Effective February 14, 1975)

Sec. 22a-50-5. Classification criteria

The Commissioner may classify a pesticide restricted when:
(a) the pesticide is intended or labelled for professional use
(b) the pesticide is intended or labelled exclusively for aquatic use
(c) a pesticide used indoors meets one or more of the following criteria:

(1) Oral LD_{50}	≤	500 mg/kg (product as sold except ''Ready-to-Use'')
	≤	2000 mg/kg (use dilution or ''Ready-to-Use'')
or		
(2) Dermal LD_{50}	≤	2000 mg/kg (product as sold except ''Ready-to-Use'')
	≤	5000 mg/kg (use dilution or ''Ready-to-Use)
or		
(3) Dust of mist acute inhalation LC_{50} (1 hr. exposure; 14 days observation)	≤	20 mg/1
or		
(4) Gas or vapor inhalation LC_{50} (1 hr. exposure; 14 days observation)	≤	2000 ppm

(d) a pesticide used outdoors or in agriculture meets one or more of the following criteria:

(1) Oral LD_{50}	≤	50 mg/kg (products as sold except ''Ready-to-Use'')
	≤	200 mg/kg (use dilution or ''Ready-to-Use'')
or		
(2) Dermal LD_{50}	≤	500 mg/kg (product as sold except ''Ready-to-Use'')

≤ 1000 mg/kg (use dilution or ''Ready-to-Use'')

or

(3) Build up of residues of ingredients or break-down products in mammalian or avian food in amounts ≤ 1/5 LD_{50} following application.

(Effective February 14, 1975)

Sec. 22a-50-6.

Repealed, February 5, 1979.

Sec. 22a-50-7. Registration

(a) Registration of each pesticide shall expire on December 31, according to the schedule set up in (b).

(b) In order to provide that 1/5 of all products shall be registered each year, on January 1, 1975, those companies whose names start with the letters A–B shall be registered for five (5) years; those whose names start with C–E for four (4) years; those whose names start with F–L for three (3) years; those whose names start with M–R for two (2) years; those whose names start with S–Z for one (1) year. Each subsequent registration shall be for five (5) years.

(c) A company registering a new pesticide shall have its fee and registration period pro-rated so as to have the next registration date for the new pesticide to fall due with the other products of the same company.

(d) A pro-rated refund of a registration fee will be made if a product is voluntarily withdrawn or cancelled before the end of its five (5) year registration period. Any refund will be pro-rated on a yearly basis except that no refund will be made for the year in which the registration is cancelled or withdrawn.

(Effective February 14, 1975)

Sec. 22a-50-8. Variances

(a) the Commissioner may grant a variance from Section 19-300b-2, Regulations of Connecticut State Agencies, upon a showing that use of a pesticide will not cause unreasonable adverse effects on the environment. When acting upon a request for a variance, the Commissioner shall consider the factors listed in Sections 22a-50-4 and 22a-50-5 for the particular pesticide.

(b) Any variance granted under this section shall state whether the pesticide is classified general or restricted.

(c) Any person wishing to obtain a variance shall file a request with the Commissioner stating with particularity his reasons and justification for the variance. The Commissioner shall hold a public hearing, following such notice as he feels sufficient, to consider the variance. The Commissioner shall make a decision to grant or deny a variance within 30 days of the end of the hearing.

(d) A decision to grant or deny a variance shall be considered a final decision of the Commissioner for purposes of judicial review, under Section 4-183, Connecticut General Statutes.

(e) A variance may be constructed so as to limit the area, amounts, and time of application of the pesticide.

(Effective February 14, 1975)

Sec. 22a-50-9.

Repealed, June 23, 1983.

See § 22a-54-2.

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Application of Pesticides from the Air

Sec. 22a-54-1. Application of pesticides from the air

(a) No permit for the application of broad spectrum chemical pesticides from the air for non-agricultural purposes shall be issued by the commissioner of environmental protection.

Permits for agricultural purposes, such as, but not limited to, those activities set forth in the definitions of ''agriculture'' and ''farming'' in section 1-1 of the general statutes, shall be issued by the commissioner of the department of environmental protection only after the applicant has produced evidence satisfactory to the commissioner that the proposed material and its method of application shall not be injurious to the public health, aquatic and animal life, including pollinating insects, or property not owned or leased by the applicant or those on whose behalf the application is made. For purposes of this section, ''broad spectrum chemical pesticides'' means a pesticide not of biological origin which is non-selective, and has the potential to prevent, destroy, repel or mitigate a variety of organisms.

(b) Notwithstanding subsection (a) of this section or section 22a-66-7 of the regulations of Connecticut state agencies, if the commissioner of environmental protection, in consultation with the commissioner of public health, determines that the application of broad spectrum chemical pesticides from the ground is impractical and that application of broad spectrum chemical pesticides from the air is necessary to control specific vectors of human disease which pose an imminent threat to public health, the commissioner of environmental protection may authorize a state agency or a municipality or their agents to engage in such application by aircraft, subject to the following conditions:

(1) A request for authorization to apply broad spectrum chemical pesticides from the air shall be in writing and shall include: (A) the purpose of the pesticide application; (B) the name and United States Environmental Protection Agency registration number of the pesticide; (C) a detailed description of the area(s) to be treated; (D) the name and business address of the applicator; and (E) the proposed date(s) and time(s) of application.

(2) Only pesticides registered by the commissioner under section 22a-48 of the Connecticut general statutes, and approved by the commissioner for aircraft application under subsection (b) of this section shall be used. Any pesticide approved for aircraft application under subsection (b) of this section shall have the least possible impact on human health and the environment, considering its rate and method of application. The commissioner may impose any conditions upon the approval he finds appropriate.

(3) Following approval by the commissioner of environmental protection, and prior to application from the air of any broad spectrum chemical pesticide authorized under this regulation, public notice of the application shall be provided by the applicant in a manner reasonably calculated to inform persons in the affected area of the pending activity and may include use of the broadcast media. Additionally, notice shall be provided to the principal of any school located within the affected area, and, if the affected area is within the watershed of a public drinking water reservoir, notice shall be given to the water utility affected. Such notice shall include, but is not limited to:

(A) The purpose of the pesticide application;

(B) The name of the pesticide(s) to be applied;

(C) A description of the area(s) to be treated; and

(D) The proposed date(s) and time(s) of the application.
(Effective December 29, 1977; amended June 2, 1997)

Sec. 22a-54-2. Fees for certification of pesticide applicators

(a) The following fees shall be charged for the examination and certification of pesticide applicators:
(1) Commercial Applicator — Supervisory
(A) examination fee: $25.00
(B) recertification examination fee for certificate holders: $10.00
(C) certification fee: $100.00 for five years;
(2) Commercial Applicator — Operator
(A) examination and certification fee: $10.00 for five years;
(3) Private Applicator
(A) examination fee: $5.00
(B) recertification examination fee for certificate holders: $5.00
(C) certification fee: $5.00 for five years
(4) Aircraft Applicator
(A) examination fee: $25.00
(B) certification fee: $25.00 for one year
(b) No fee shall be charged to any federal, state or municipal employee who applies pesticides as part of his or her duties as a governmental employee provided that any certificate for which a fee is not charged shall be automatically void if the holder leaves government employment.
(Effective June 23, 1983)

Sec. 22a-54-3. Financial responsibility of commercial aircraft applicators

(a) The Commissioner shall not issue, modify or renew a commercial aircraft applicator certification unless and until the applicant submits valid proof of financial responsibility to consist of the following minimum insurance coverages:
Comprehensive General Liability:
(1) Bodily Injury Liability – $100,000 each occurrence, $300,000 aggregate; and
(2) Property Damage Liability – $100,000 each occurrence (including completed operation and chemical liability).
(b) Insurance policies offered to satisfy the requirements of subsection (a) may be written with combined bodily injury and property damage limits so long as their combined limits equal or exceed the sum of required individual limits.
(c) Any misrepresentations or falsehoods contained in the certificate of insurance shall make any commercial aircraft applicator certification issued in reliance on the certificate of insurance automatically void.
(d) The applicator shall notify the Department of Environmental Protection of any material alteration or modification in his or her policy and/or stated coverages within ten (10) days of any such alteration or modification.
(e) The applicator shall notify the Department of Environmental Protection of the cancellation of the policy within ten (10) days of the cancellation.
(f) Failure to maintain the minimum coverages stated in subsection (a) shall render the applicator's certification automatically void.
(g) No aircraft application of pesticides shall be made in Connecticut by an applicator whose insurance policy has lapsed or expired.
(Effective June 23, 1983)

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Fees for Examination and Registration of Pesticide Distributors

Sec. 22a-56-1. Fees for registration of pesticide distributors

The following fees shall be charged for the examination and registration of distributors of restricted or permit use pesticides:

(a) Examination fee: $25.00

(b) Registration fee: $20.00 for one year

(Effective June 27, 1985)

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Emergency Use Authorization of Pesticides

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Repealed, February 5, 1979

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Discarding of Pesticides and Containers

Sec. 22a-65-1. Discarding of pesticides and containers

No person shall discard any pesticide or container therefor in such a manner as to cause pollution of any waterway or endanger plant and animal life or the public health and safety. The discarding of any pesticide into any public sewage disposal system is prohibited.

(Effective June 23, 1983)

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Use of Pesticides

Sec. 22a-66-1. Definitions

(a) The definitions of terms used in these regulations shall be consistent with the definitions in Section 22a-47 of the General Statutes.

(b) The following terms not defined in Section 22a-47 are defined as follows:

(1) ''Borer control'' means the control through the use of pesticides of insects whose larval life takes place within plant stems;

(2) ''Termite control'' means the extermination of termites within, beneath or closely adjacent to a structure and the prevention of future termite entry which is accomplished through the use of pesticides.

(3) An Electrical Service Entrance shall be that area of a structure where the electrical power supply enters and is subsequently distributed to other parts of the structure.

(4) A pesticide distributor shall be any person representing himself/herself or a single firm, corporation, dealership or other entity engaged in the business of distributing, selling, offering for sale, or holding for sale to the ultimate user, any restricted-use or permit-use pesticide.

(Effective February 5, 1979)

Sec. 22a-66-2. Control of registrations and uses

(a) The following pesticides shall not be registered and their use shall be prohibited:

(1) Arsenic products except tricalcium arsenate for control of Poa annua, sodium arsenate for use in the treatment of lumber for protection against termites and decay-producing fungi, calcium acid methanearsonate (CMA), monosodium methanearsonate (MSMA), disodium methanearsonate (DSMA, MAA), ammonium methanearsonates and cacodylic acid and its sodium salt.

(2) Benzene hexachloride (BHC).

(3) Cadmium products.

(4) Dichloro diphenyl dichloroethane (DDD).

(5) Dichloro diphenyl trichloroethane (DDT).

(6) Dodecachlorooctahydro–1,3,4–metheno–1H–cyclobuta (cd) pentalene (Mirex).

(7) Lead products.

(8) Mercury products except inorganic mercury products for control of winter turf diseases on golf courses, provided that no mercury products will be applied to land which is either: (i) (aa) within two hundred and fifty feet of high water of a potable water supply reservoir or one hundred feet of all watercourses leading to a reservoir; (bb) within the areas along watercourses which are covered by any of the critical components of a stream belt; (cc) land with slopes fifteen per cent or greater without significant interception by wetlands, swales and natural depressions between the slopes and the watercourses; (dd) within two hundred feet of groundwater wells; (ee) an identified direct recharge area or outcrop of aquifer now in use or available for future use, or (ff) an area with shallow depth to bedrock, twenty inches or less, or poorly drained or very poorly drained soils as defined by the United States soil conservation service that are contiguous to land described in subdivisions (cc) or (dd) of this subsection and that extend to the top of the slope above the receiving watercourse; or (ii) land which is either (aa) on a public drinking supply watershed which is not included in subsection (i) above or (bb) completely off a public drinking supply watershed and which is within one hundred and fifty feet of a distribution reservoir or a first-order stream tributary to a distribution reservoir.

(9) Phosphorous paste products.

(10) Selenium products.

(11) Terpene polychlorinates (65 or 66% chlorine) consisting of chlorinated camphene, pinene and related polychlorinates (Strobane).

(12) Thallium products.

(13) Toxaphene.

(b) The following pesticides shall be registered and used for the following purposes only:

(1) Aldrin for use as a termite control.

(2) Dieldrin for use as a termite control.

(3) Lindane or leafminer, bark beetle, powder post beetle, or borer control, or for prescribed use on humans by a physician licensed by the State of Connecticut, or for prescribed use on animals by a veterinarian licensed by the State of Connecticut.

(4) Endrin for use as a mouse control in commercial orchards.

(5) Sodium fluoride for use as a wood preservative.

(6) Strychnine for use as a rat and mouse control.

(7) Heptachlor to control subterranean termites when the method involves soil injection, trench application, or other soil incorporation method of application.

(c) The following pesticides shall not be registered or used for the following purposes:

(1) Any pesticide activated by thermal means, except pyrethrum, pyrethrins or pyrethoroids, for indoor application, except indoor application for agricultural purposes;

(2) Captan on pets or other animals;

(3) Chlordane products

(A) for indoor applications except by applicators licensed by the State of Connecticut;

(B) on pets or other animals except by veterinarians licensed by the State of Connecticut;

(C) for indoor or outdoor application by mistblowers and other mist generators or thermal foggers.

(4) Any antifouling paint or other substance containing a tributyltin compound for use or application on vessels or other structures or equipment in fresh water or the marine environment, except as provided in subparagraphs (B), (C) and (D) of this subdivision.

(A) For the purposes of this subdivision the following terms are defined as follows:

''Antifouling paint'' means a compound, coating, paint, or treatment applied or used for the purpose of controlling fouling organisms on vessels and other structures or equipment in marine or fresh water.

''Commerical boatyard'' means a facility that engages for hire in the construction, storage, maintenance, repair, or refurbishing of vessels.

''Release rate'' means the rate at which a tributyltin compound is released from an antifouling paint containing a tributyltin compound over the long term, as measured using:

(1) The American Society for Testing Material (ASTM) standard test method which the U.S. Environmental Protection Agency required in its July 29, 1986, data call-in notice on tributyltin compounds used in antifouling paints; or

(2) Any alternative method adopted by the U.S. Environmental Protection Agency and published in the Federal Register.

''Tributyltin compound'' means any organotin compound that has three normal butyl groups attached to a tin atom and with or without an anion, such as chloride, fluoride, oxide.

''Vessel'' means every description of watercraft, other than a seaplane on water, used or capable of being used as a means of transportation on water.

(B) A person may distribute or sell an antifouling paint containing a tributyltin compound with a release rate equal to or less than 4.0 micrograms per square centimeter per day to the owner or agent of a commercial boatyard.

(C) The owner or agent of a commercial boatyard may possess and apply or purchase for application an antifouling paint containing a tributyltin compound with a release rate equal to or less than 4.0 micrograms per square centimeter per day, if such antifouling paint is applied only within a commercial boatyard and:

(i) is applied to vessels exceeding 25 meters in length; or

(ii) is applied to aluminum hulls.

(D) This subsection does not prohibit the sale, application or possession of an antifouling paint containing a tributyltin compound if such antifouling paint:

(i) is in a spray can of 16 ounces or less;

(ii) is commonly referred to as an outboard or lower drive unit paint and labeled for such purpose; and

(iii) has a release rate equal to or less than 4.0 micrograms per square centimeter per day.

(Effective March 27, 1989)

Sec. 22a-66-2a.

Repealed, April 18, 1986.

Sec. 22a-66-2b. The use of microencapsulated methyl parathion

No person shall apply any microencapsulated methyl parathion except to control San Jose scale in orchards or, from January 1 through June 30, inclusive, to control first generation European corn borer on sweet corn. Prior to applying microencapsulated methyl parathion, the applicator shall ensure that the field or orchard being treated and any area subject to pesticide drift bordering thereon, is as free of flowering ground cover as possible by mowing, use of herbicide or by other techniques. It is recommended that microencapsulated methyl parathion not be applied when orchards or fields and areas subject to pesticide drift bordering thereon, contain more than five flowers per square yard.

(Effective April 18, 1986)

Sec. 22a-66-3. Application of pesticides

(a) No person may use a federally restricted-use pesticide except under the supervision of a certified applicator.

(b) There shall be a check valve or anti-siphoning device on all hoses used to draw water from a water supply if a reversal of flow would cause any pesticide to enter into the hose. The discharge side of a pump shall not be connected to any water system.

(c) All filler hoses used as the intake in drawing water from water courses shall be covered except when in use, in order to prevent pesticide contamination.

(d) No water to be used in pesticide applications shall be drawn from any stream or pond leading to a potable water supply reservoir.

(Effective July 3, 1979)

Sec. 22a-66-4. Registration of pesticide distributors

(a) All pesticide distributors shall register annually with the Commissioner. If a firm has more than one location or sales outlet at which a restricted-use or permit-use pesticide is distributed, sold, held for sale, or offered for sale, then each outlet shall have at least one person who has demonstrated his/her competency within the meaning of Section 22a-56 (b) of the General Statutes.

(b) Application for registration shall be made on forms provided by the Commissioner. Application forms shall be submitted annually prior to October 31st of each year.

(c) Repealed, June 27, 1985.

(d) In order to receive a registration, distributors must first demonstrate competence with respect to the handling of pesticides and demonstrate knowledge concerning application, hazard and impact of pesticides, including but not limited to the legal uses and precautions regarding the restricted-use and permit-use pesticides they may sell. The Commissioner may refuse registration to any applicant who has shown by previous action that he/she is not competent with respect to the handling and use of pesticides. If registration is so refused, the applicant shall be so informed in writing, giving the reasons for such refusal. Any person aggrieved by such a decision may, within thirty days from date of issuance of such denial, request a hearing before the Commissioner, which hearing shall be conducted in accordance with Chapter 54 of the General Statutes.

(e) Registered distributors shall maintain records of the sale of permit-use or restricted-use for at least three years. An accurate report of the sales of restricted-use and permit-use pesticides for the year shall be submitted by the distributor on forms provided by the Commissioner as a requirement for renewal of registration.

(f) Registered distributors shall maintain their restricted-use and permit-use pesticides in secure structures, physically separated from food, feed, grain, electrical service entrances, and any other condition which could create a potentially hazardous situation. The entrance shall be marked with appropriate warning signs and kept closed and locked when unattended. The structure should be well ventilated, clean and contain essential fire prevention and clean-up equipment, including but not limited to absorbent material to contain spills, fire extinguisher and respirator.

(g) Each registered distributor shall be responsible for the acts of co-workers in relation to all provisions of these regulations.

(h) Any distributor displaying restricted-use pesticides for sale, shall display such pesticides in an area separate from general-use pesticides and shall post a prominent sign bearing the statement ''for sale to certified applicators only'' at the display. The statement shall be imprinted in letters at least one inch high.

(i) The fee for the registration of restricted or permit use pesticide distributors shall be as specified in Section 22a-56-1 of the Regulations of Connecticut State Agencies.

(Effective June 27, 1985)

Sec. 22a-66-5. Certification and licensing of applicators

(a) In the determination of competency required for licensing non-certified operational commercial applicators, the Commissioner may require that an applicant meet a lower level of competency than is required of certified supervisory commercial applicators.

(b) No person under 18 years of age shall be issued a pesticide certification or license.

(c) All requests for duplicate licenses or certificates shall be made in writing. A charge of two dollars may be made to cover the cost of each duplicate license or certificate issued.

(d) The Commissioner may issue two types of certification documents which may include the following information:

(1) Full size document: applicator's name, address, certification number, expiration date and categories of certification.

(2) Wallet size document: same information as in full size document except address, plus applicator's photograph and signature.

The wallet size document shall be carried on the person of anyone who applies pesticides for hire when he or she is acting in the capacity of a commercial-supervisory applicator.

(e) A certified applicator shall notify the Commissioner of any change of address within 30 days of such change.

(f) A supervisory certificate shall be required for commercial applicators who are responsible for deciding whether or not pesticides are to be employed, how they are to be employed, what pesticides are to be used, the dosages and timing involved in such pesticide use and the methods of application and precautions to be taken in the use of such pesticides. This includes, but is not limited to, any person who, upon inspection of stored products, crops, plants, bodies of water, or a building or other structure for pest damage, recommends or suggests treatment to control or alleviate pest damage.

(g) No commercial application of pesticides shall be made unless a person holding a valid supervisory certificate:

(1) is present at the time of application where such presence is required by the labeling; or

(2) where labeling does not require the presence of a certified supervisory applicator at the site of application, the certified supervisory applicator must either be present at the time of application or must provide written instruction to the certified operator that shall include the certified supervisor's name and certification number, the certified operator's name and certification number, the pest to be controlled, the pesticide to be used, directions for use of the pesticide, and be available if and when needed.

(h) An operator's license shall be required for commercial applicators who actively use pesticides in other than a supervisory capacity including but not limited to:

(1) a person who applies, mixes or handles pesticides in other than completely closed containers.

(2) a person who comes in contact with pesticides through drift for more than brief periods.

(3) a person who assists with the application of pesticides under the supervision of a holder of a supervisory license.

(i) The Commissioner may issue new certificates so that one-fifth of the certificates come due each year on the following schedule:

Year one—
applicators whose last names start with letters A-C
Year two—
applicators whose last names start with letters D-H
Year three—
applicators whose last names start with letters I-M

Year four—
applicators whose last names start with letters N-S
Year five—
applicators whose last names start with letters T-Z
The required fee may be pro-rated in order to have the next renewal date fall due according to the above schedule.
(Effective April 22, 1982)

Sec. 22a-66-6. Permits

(a) Repealed, June 27, 1985
(b) All permit applications shall be made on forms furnished by the Commissioner and the applicant shall furnish all information required by the Commissioner.
(c) A permit-use pesticide requires the permit holder to be physically present at the time the permit-use pesticide is applied.
(Effective July 3, 1979)

Sec. 22a-66-7. Aircraft application

(a) Application for a permit to apply pesticides or fertilizers from the air shall be made on forms furnished by the Commissioner and the applicant shall furnish all information required by the Commissioner.
(b) No pesticide may be applied from the air to a tract of land less than 10 acres in size unless the tract of land to be treated is part of a larger parcel of land that is at least 10 acres in size. All aerial applications must have the prior inspection and approval required by Section 22a-54 (e) of the General Statutes.
(c) No pesticidal dust may be applied within 100 feet of a public highway.
(d) Repealed, December 22, 1982.
(e) No pesticide shall be applied from the air for agricultural purposes within 200 feet of a watercourse, pond or lake.
(f) Congested areas shall be considered those areas zoned ½ acre or less, or municipally or privately owned public parks, public playgrounds, and public swimming areas.
(g) (1) For the aerial application of pesticides and fertilizers other than Bacillus thuringiensis (B.t.), a written release is necessary from any landowner or resident whose property is under the spray pattern of the aerial application or subject to drift from such an application. The area subject to drift will be considered to be a minimum of 200 feet from the flight path of a helicopter and 300 feet from the flight path of a fixed-wing aircraft.
(2) (A) An applicant for a permit for aerial application of Bacillus thuringiensis (B.t.) must notify each landowner or resident whose property is under the spray pattern of an aerial application or subject to drift from such an application at least 31 days prior to the proposed date of spraying. The area subject to drift will be considered to be a minimum of 200 feet from the flight path of a helicopter and 300 feet from the flight path of a fixed-wing aircraft.
(B) Such notice shall be in writing and shall state:
(i) the proposed date or dates on which spraying is to occur;
(ii) the name of the pesticide to be sprayed;
(iii) the name of the permit applicant;
(iv) the name of the applicator, if known;
(v) in what manner, to whom and at what address the landowner or resident is to object to such spraying if he or she desires;
(vi) the time limit within which he or she must object; and

(vii) that if no objection is made, the area will be sprayed.

(C) After receiving notice, a landowner or resident may waive his or her right to object by signing a written release. If all landowners or residents in an area waive their right to object, that area may be sprayed prior to expiration of the objection period, provided, however, that the information specified in subparagraph (E) is forwarded to the commissioner, and a permit is obtained.

(D) Bacillus thuringiensis (B.t.) shall not be applied from the air if a landowner or resident whose property is under the spray pattern or subject to drift from the application objects, in writing, to the permit application within 30 days of the date notification was received.

(E) At the end of the objection period, the permit applicant shall forward to the commissioner (i) all objections received; (ii) a list of those landowners or residents who have consented, those who have objected, and those who have not responded; and (iii) proof that all landowners or residents have received written notice. Acceptable proof may include receipts of certified mail delivery or signatures secured at time of delivery.

(h) In accordance with subsection (e) of Section 22a-54 of the General Statutes, a fee shall be submitted with each application filed under this section according to the following schedule:

(1) Permitted area 10 to 49 acres, $30.00.

(2) Permitted area 50 to 149 acres, $150.00.

(3) Permitted area 150 acres or larger, $300.00.

Any application submitted without the proper fee shall be considered incomplete, and shall not be processed.

(i) Payment of fees under this section shall be by certified check, money order or personal check payable to the Department of Environmental Protection.

(j) Fees paid under this section shall be nonrefundable.

(Effective July 13, 1993)

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Posting and Notification of Outdoor Pesticide Applications

Sec. 22a-66a-1. Public notification of outdoor pesticide applications

(a) **Definitions**

(1) ''fenced area'' means an area which is completely enclosed by a fence, wall, or other natural or artificial barrier which prevents unauthorized entry.

(2) ''pesticide'' is defined in section 22a-47 of the general statutes.

(3) ''point of entry'' means each location which is designed or generally used for entry onto the property by pedestrians or motor vehicles.

(b) **General notification requirements**

(1) In accordance with the requirements of subsection (c) of section 22a-66a of the general statutes, and except as provided therein, any person making an outdoor application of a pesticide within one hundred yards of any property line shall post a sign notifying the public of the pesticide application at each conspicuous point of entry.

(2) In addition to the requirements of subsection (b) (1) of this section, a commercial pesticide applicator making an outdoor application of a pesticide within one hundred yards of any property line shall post signs notifying the public of the pesticide application at conspicuous locations no farther apart than every one hundred fifty feet or part thereof of road frontage of treated property.

(3) Pesticide application signs required by this subsection shall be posted by the person applying the pesticide at the time of the pesticide application.

(4) Signs posted along road frontage shall face the road, and signs posted at a point of entry shall face the direction of persons as they enter the property.

(5) The bottom of each sign shall be at least twelve inches above the ground and the top no higher than forty-eight inches above the ground. Signs shall be posted at the property boundary between two and five feet from the sidewalk or, if there is no sidewalk, between two and five feet from the road, or, if there is also no road, between two and five feet from the property boundary. When landscaping or other conditions would make a sign inconspicuous or difficult to read if the sign were posted within the distances specified in this paragraph, the sign shall be posted in a similar manner such that it is conspicuous and easily read by any adult or child entering or passing the property on foot.

(6) No person shall remove or render difficult to read, in whole or in part, any posted pesticide application sign within twenty-four hours after the pesticide application to which it applies.

(7) Each sign required by subsection (c) of section 22a-66a of the general statutes shall conform to the following requirements:

(A) The sign shall be a minimum of four inches high by five inches wide.

(B) The sign shall be of a rigid material substantial enough to be easily read for at least twenty-four hours after the pesticide application despite adverse weather conditions.

(C) The sign shall contain the following information in black lettering on a bright yellow background in the format specified in Appendix A:

(i) The words, ''PESTICIDE APPLICATION'' in bold letters of at least thirty-six point type;

(ii) The symbol of a circle at least two inches in diameter with a diagonal slash over a person, child and dog;

(iii) The statement, ''Pesticide applied on (date) by (name and telephone number of the pesticide application business, or the words ''property owner'' if the pesticide application is made by the property owner)'' in at least twelve point type;

(iv) The statement, ''This sign must remain for 24 hours after pesticide application'' in at least twelve point type.

(D) Except for the date of the pesticide application and the name and telephone number of the pesticide application business or the words ''property owner,'' the information required on the sign shall be professionally printed. The remaining information may be handwritten, provided it is in permanent ink and in a print that is easy to read.

(c) **Requirements for pesticide wholesalers, distributors and retailers**

(1) In accordance with subsection (e) of section 22a-66a of the general statutes, any wholesaler or distributor selling pesticides to retail establishments shall make available to the owners of such retail establishments signs which meet the requirements of subsection (b) of this section. The owner of each retail establishment shall, at the time of sale, provide signs which meet the requirements of subsection (b) of this section to each purchaser of a pesticide registered with the state or federal government for outdoor use. Signs shall be provided in a sufficient number to allow the purchaser to meet the requirements of section 22a-66a (c) of the general statutes.

(2) The owner of each retail establishment selling pesticides which are registered with the state or federal government for outdoor use shall display a sign notifying customers of the posting requirements of section 22a-66a (c) of the general statutes. The sign shall be conspicuously displayed at each point of sale in the retail establishment in such a manner that it is easily read by purchasers at the time of sale and shall comply with the following requirements:

(A) The sign shall be in the following format and contain the following statements which shall be professionally printed:

''NOTICE TO PESTICIDE BUYERS'' in bold letters at least one-half inch high, and the following statements in letters at least three-eighths of an inch high:

(1) Under Connecticut law*, any person making an outdoor application of a pesticide within 100 yards of any property line must, at the time the pesticide is applied, post a sign notifying the public of the pesticide application at each conspicuous point of entry to the property.

(2) Pesticide sellers must provide the required signs to each buyer of a pesticide which is registered with the state or federal government for outdoor use.

(3) Exceptions to the posting requirements:

a. noncommercial pesticide applications to an area less than 100 square feet;

b. noncommercial pesticide applications to a completely fenced area; or

c. pesticide applications on land that produces agricultural commodities from which gross sales in excess of one thousand dollars were realized or can reasonably be expected to be realized during any calendar year.''

(d) **Notice of pesticide applications to golf courses**

(1) In accordance with subsection (d) of section 22a-66a of the general statutes, no more than twenty-four hours prior to applying a pesticide on a golf course, any pesticide application business or other person applying the pesticide shall post a sign notifying the public of the application at a conspicuous location on the first tee and at a conspicuous location at the point of registration at the clubhouse. Golf courses with more than nine holes shall place a pesticide application sign at the first tee of each nine holes. If the location of the first tee differs for men and women, a sign shall be posted at both tees.

* (Section 22a-66a (c) of the Connecticut General Statutes and Section 22a-66a-1 of the Regulations of Connecticut State Agencies.)

(2) The bottom of each sign shall be posted a minimum of forty inches above the ground and the top no higher than sixty inches above the ground.

(3) No person shall remove or render difficult to read, in whole or in part, any information which is required to be posted under this subsection within twenty-four hours after the pesticide application to which it applies.

(4) Each sign required by subsection (d) of section 22a-66a of the general statutes shall conform to the following requirements:

(A) The sign shall be a minimum of twelve inches high by twelve inches wide.

(B) The sign shall be of a rigid material substantial enough to be easily read for at least twenty-four hours after the pesticide application despite adverse weather conditions.

(C) The sign shall contain the following information:

(i) The statement, ''PESTICIDE APPLICATION WITHIN LAST 24 HOURS'' in bold letters at least one inch high.

(ii) The statement, ''Contact __(blank)__ for more information'' in letters at least three-quarters of an inch high. The blank space shall contain the name or names of the person or persons at the golf course to contact for more information on the pesticide application to the golf course.

(iii) Each sign shall specify in letters at least one-half inch high the tees, greens, fairways and other areas on the golf course to which pesticides have been applied within the preceding twenty-four hours or will soon be applied.

(5) The requirements of this section shall be in addition to those prescribed in section 22a-66a (b) of the General Statutes and section 22a-66a-2 of the Regulations of Connecticut State Agencies.

(e) **Notice of pesticide applications to lakes and ponds.**

(1) In accordance with subsection (g) of section 22a-66a of the general statutes, any pesticide application business or department, agency or institution of the state or a municipality, prior to making a pesticide application in any lake or pond with any public access owned by the state or a municipality shall give newspaper notice to the public in accordance with subsection (g) of section 22a-66a, and shall post a sign in a conspicuous location at each place of public access owned by the state or a municipality.

(2) The bottom of each sign shall be posted a minimum of forty inches above the ground and the top no higher than sixty inches above the ground.

(3) No person shall remove or render difficult to read, in whole or in part, any information which is required by this subsection until the end of the longest waiting period specified in subparagraph (C) (v) of this subsection.

(4) Each sign required by subsection (g) of section 22a-66a of the general statutes shall conform to the following requirements:

(A) The sign shall be a minimum of eight and one half inches high by eleven inches wide.

(B) The sign shall be of a rigid material substantial enough to be easily read for at least the longest waiting period specified in subparagraph (C) (v) of this subsection.

(C) The sign shall contain the following information in black lettering on a bright yellow background in the format specified in Appendix B:

(i) ''CAUTION'' in bold print of at least thirty-six point type, followed by, ''LAKE TREATED WITH PESTICIDES'' in bold print of at least twenty-four point type;

(ii) ''Pesticide name(s): (the common name of each pesticide applied)'' in bold print of at least twenty point type;

(iii) ''Date/time: (date and time each pesticide was applied)'' in bold print of at least twenty point type;

(iv) ''Applicator: (the name and telephone number of the pesticide application business or other person that applied the pesticide)'' in bold print of at least twenty point type;

(v) The statement, ''Do not use the water for the following purpose(s) until the date and time noted below:'' in at least eighteen point type, followed by the dates and times that swimming and other water-contact activities, drinking, fishing, irrigation, livestock watering and other uses specified on the pesticide label or pesticide use permit may be resumed, according to the label and permit, whichever is more stringent. If the label and permit are silent as to when a certain activity may be resumed, the words ''No Restriction'' shall be used for that activity. Nothing in this subsection shall prohibit a pesticide application business, department, agency or institution from placing more stringent water use restrictions on the notice than are required by the label and permit.

(vi) The statement, ''This sign must remain posted until the latest date above'' in bold print of at least twenty-four point type.

(D) Except for the date and time of the pesticide application, the name and telephone number of the pesticide application business or other person that applied the pesticide, and the end of each waiting period, the information required on the sign shall be professionally printed. The remaining information may be handwritten, provided it is in permanent ink and in a print that is easy to read.

(5) Any notice of pesticide application required to be published pursuant to subsection (g) of section 22a-66a of the general statutes regarding pesticide application to a lake or pond with any public access owned by the state or a municipality and pesticide applications to any private lake or pond with more than one owner of shoreline property, or required to be published or posted pursuant to subsection (i) of section 22a-66a of the general statutes regarding mosquito control, shall include but not be limited to the following information:

(A) the common name of each pesticide to be applied;

(B) the location of the pesticide application;

(C) the purpose of the pesticide application;

(D) the estimated date of the pesticide application, and the statement, ''Information on the specific date of application may be obtained from the person named below.''

(E) the name, address and telephone number of a contact person affiliated with the pesticide application business or department, agency or institution of the state or municipality making the pesticide application.

(F) the statement, ''Do not use the water for the following purpose(s) until the date and time noted below:'' followed by the dates and times that swimming and other water-contact activities, drinking, fishing, irrigation, livestock watering and other uses specified on the pesticide label or pesticide use permit may be resumed, according to the label and permit, whichever is more stringent. If the label and permit are silent as to when a certain activity may be resumed, the words ''No Restriction'' shall be used for that activity. Nothing in this subsection shall prohibit a pesticide application business, department, agency or institution from placing more stringent water use restrictions in the notice than are required by the label and permit.

(6) A pesticide application shall not be made prior to the estimated date of application specified in a published notice. If the actual date of pesticide application

will exceed the estimated date of application by more than three calendar days, the notice shall be republished.

(Effective November 28, 1990)

Sec. 22a-66a-2. Requests for notification of pesticide application to abutting property

(a) In accordance with subsection (b) of section 22a-66a of the general statutes, persons requesting notice of pesticide applications to abutting property within one hundred yards of any property line shall submit the following information in writing to the pesticide application business or to the Pesticide Management Division of the Department of Environmental Protection:

(1) the name, address, and telephone number of the person requesting notification and the best time to notify that person; and

(2) the name, address and telephone number, if listed in the telephone directory, of any person whose property abuts the property of the person requesting notification.

(b) As part of the business records required under section 22a-66g of the general statutes, a pesticide application business shall retain a copy of any request for notification which it receives, and shall forward the original request to the Pesticide Management Division of the Department of Environmental Protection within five calendar days of its receipt. The pesticide application business shall commence twenty-four-hour prior notification of pesticide application immediately upon receipt of a request for notification, notwithstanding the date the person submitting the request is included in the registry maintained by the commissioner. Except as provided in subdivision (c) (2) of this section, the pesticide application business shall continue to provide such notification for a minimum of three years from the date the request for notification was received, and may discontinue notification at that time only if it gives the person who submitted the request no less than thirty days' prior notice of its intention to discontinue notification and the person's right to renew his or her request.

(c) (1) The commissioner shall maintain a registry of persons who have submitted requests for notification to a pesticide application business or to the commissioner. In order to be included on the registry for any calendar year, the request must be received by the commissioner no later than January 31, 1991 for the 1991 calendar year and no later than December 31 of the preceding year for each calendar year thereafter. In 1991, requests received after February 1 shall be included in the 1992 registry. In years thereafter, requests received after January 1 shall be included in the next year's registry.

(2) The commissioner may periodically send a notice to persons listed on the registry requesting that if they wish to remain on the registry they must submit the information specified in subsection (a) to the Pesticide Management Division within a specified number of days. The commissioner may delete from the registry any person who does not submit the required information by the required date. A pesticide application business may discontinue providing notification to any person who the commissioner deletes from the registry in accordance with this paragraph. Any person deleted from the registry may submit a new request for notification in accordance with subsection (a) of this section, and notice shall be provided to such person in accordance with this section.

(3) The commissioner shall provide a copy of the notification registry to all registered pesticide application businesses. Any pesticide application business that has not received a copy of the registry by April 15 of each year shall notify the commissioner in writing of that fact on or before April 30 of that year.

(4) Upon receipt of the registry, a pesticide application business shall thereafter, until the registry is replaced, provide notice to any owner or tenant on the registry who abuts a property to be treated. When the registry is replaced by the commissioner, the pesticide application business shall provide notice to any owner or tenant on the replacement registry who abuts a property to be treated.

(d) (1) Any notice provided pursuant to subsection (b) of section 22a-66a of the general statutes, including any notice placed on a door in accordance with that subsection, shall include but not be limited to:

(A) the common name of the pesticide likely to be applied;

(B) the location of the pesticide application;

(C) the date and approximate time of the pesticide application;

(D) the name, address and telephone number of the pesticide application business applying the pesticide;

(2) A pesticide application business shall provide notice in accordance with section 22a-66a (b) of the general statutes. If the pesticide application is not made on the date specified in the notice, the pesticide application business shall notify the owner or tenant of any change in application date at least twenty-four hours prior to the amended date for pesticide application.

(3) For each notification or attempted notification, a pesticide application business shall keep a record of the date, name of person notified or attempted to be notified and the method of notification or attempted notification. These records shall be maintained as a part of the business records required under section 22a-66g of the general statutes.

(Effective November 28, 1990)

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Application of Pesticides by State Agencies

Sec. 22a-66*l*-1. Application of pesticides by state agencies

(a) Any state department, agency or institution considering the indoor or outdoor application of a pesticide, as defined in Section 22a-47 of the general statutes, shall consider using integrated pest management methods and techniques before making any pesticide application. Assistance from the University of Connecticut Cooperative Extension Service may be provided in accordance with Section 22-11b of the general statutes.

(b) By April 1, 1991, any state department, agency or institution which applies pesticides or contracts for the application of pesticides shall adopt a pest control management plan describing the pest control activities to be conducted by the department, agency, institution and its agents. Any state department, agency or institution which does not currently apply pesticides or contract for their application and which therefore does not prepare a plan by April 1, 1991, but which thereafter intends to apply or contract for the application of a pesticide, shall prepare such a plan prior to any pesticide application. Pest control management plans shall be revised by January 1 of each year to reflect any changes in the pest control activities or intentions of the department, agency or institution.

(c) **Each pest control management plan shall include:**

(1) the name and business address of the state department, agency or institution preparing and implementing the plan;

(2) A description of the objectives of the plan;

(3) the name, business address and telephone number of a contact person, employed by the department, agency or institution, familiar with the objectives and contents of the plan;

(4) a list and description of integrated pest management options to be implemented by the department, agency or institution;

(5) a list and description of integrated pest management options rejected and the reasons for rejecting each option;

(6) a list and description of pesticide use programs to be implemented by the department, agency or institution including but not limited to the following:

(A) the types and amounts of pesticide to be used;

(B) the need for pesticide use and purposes for which the pesticides are to be used;

(C) the locations to be treated and the timing and frequency of pesticide application to each location;

(D) the name and business registration number of any commercial pesticide application business that the department, agency or institution plans to have perform pesticide applications for it;

(E) the name and certification number of any state employees that will perform pesticide applications for the department, agency or institution; and

(F) maps identifying the location of any public water supply watershed or well field, as delineated in the ''Atlas of the Public Water Supply Sources and Drainage Basins of Connecticut'' published by the Department of Environmental Protection, within which any pesticide applications may be made, and special considerations regarding pesticide applications in those areas.

(d) The plan shall be reviewed and approved by a designated representative of the head of the department, agency or institution, retained by the department, agency or institution, and made available for inspection upon request of a representative of the Department of Environmental Protection.

(e) Any state department, agency or institution that applies any pesticide or implements an integrated pest management program shall maintain a record of its pesticide applications and integrated pest management programs implemented. These records shall be maintained for not less than five years after the date of pesticide application and the implementation of an integrated pest management program, and shall include:

(1) A description of each integrated pest management method implemented;

(2) the reason for not using integrated pest management methods if none was used;

(3) the purpose of each pesticide application and a description of each pesticide application including but not limited to:

(A) the name and certification number of the commercial supervisor and the commercial operator;

(B) the kind, amount and rate of application of pesticide used;

(C) the date and place application;

(D) the name of the manufacturer and the U.S. Environmental Protection Agency registration number of each pesticide used; and

(E) the pest treated for.

(Effective November 28, 1990)

Appendix A

PESTICIDE APPLICATION

Pesticide Applied On:

By:

This sign must remain for 24 hours following pesticide application

Appendix B

CAUTION

LAKE TREATED WITH PESTICIDES

PESTICIDE NAME(S): **DATE/TIME APPLIED:**

APPLICATOR: **PHONE:**

Do not use the water for the following purpose(s) until the date and time noted below:

Swimming or other water contact: Fishing: Irrigation:

Drinking: Livestock Watering: Other:

THIS SIGN MUST REMAIN POSTED UNTIL THE LATEST DATE ABOVE

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Application of Chemicals to State Waters

Sec. 22a-66z-1. Application of chemicals to state waters

(a) No person shall introduce or cause to be introduced any chemical into the waters of the State for the control of aquatic vegetation, fish populations, or other aquatic organisms without a permit issued by the Commissioner of Environmental Protection.

(b) Application for said permit shall be on forms provided by the Commissioner of Environmental Protection and shall include but need not be limited to the following information:

(1) Name and address of applicant.

(2) The type of area to be treated (i.e. tidal waters, pond, etc.).

(3) Whether the area to be treated is in a public water supply watershed.

(4) The name, if any, and size of the area to be treated.

(5) Owner(s) of the area to be treated.

(6) Organisms to be controlled.

(7) Species of fish present.

(8) Chemicals to be applied.

(9) Quantity of each chemical to be applied.

(10) Person who will treat the pond.

(11) Any other information deemed necessary by the Commissioner of Environmental Protection, and

(12) Signature of applicant or person responsible for the accuracy of the information in the permit application.

(c) No person shall distribute, sell or offer for sale any pesticide for which a permit is required under this section unless the person receiving such pesticide has a valid permit issued by the Commissioner of Environmental Protection.

(d) Permits shall be signed by the pesticide distributor at the time of sale or distribution and shall remain in the possession of the permit holder. Once the permit is signed by the distributor, the permit will no longer be valid for the purchase of any chemicals.

(e) Permits shall be valid for one year following the date of issuance.

(f) A fee of $25.00 shall be submitted with each application filed under this section. Any application submitted without the proper fee shall be considered incomplete, and shall not be processed.

(g) Payment of fees under this section shall be by certified check, money order, or personal check payable to the Department of Environmental Protection.

(h) Fees paid under this section shall be nonrefundable.

(Effective July 13, 1993)

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Control of Noise

Sec. 22a-69-1. Definitions

Sec. 22a-69-1.1. General

(a) **adaptive reuse** means remodeling and conversion of an obsolete or unused building or other structure for alternate uses. For example, older industrial buildings, warehouses, offices, hotels, garages, etc., could be improved and converted for reuse in terms of industrial processes, commercial activities, educational purposes, residential use as apartments, or other purposes.

(b) **aircraft** means any engine-powered device that is used or intended to be used for flight in the air and capable of carrying humans. Aircraft shall include civil, military, general aviation and VTOL/STOL aircraft.

(i) **aircraft, STOL** means any aircraft designed for, and capable of, short take-off and landing operations.

(ii) **aircraft, VTOL** means any aircraft designed for, and capable of, vertical take-off and landing operations such as, but not limited to, helicopters.

(c) **airport** means an area of land or water that is used, or intended to be used, for the landing and takeoff of aircraft and is licensed by the State of Connecticut Bureau of Aeronautics for such use. ''Airport'' shall include all buildings and facilities if any. ''Airport'' shall include any facility used, or intended for use, as a landing and take-off area for VTOL/STOL aircraft, including, but not limited to, heliports.

(d) **ANSI** means the American National Standards Institute or its successor body.

(e) **best practical noise control measures** means noise control devices, technology and procedures which are determined by the Commissioner to be the best practical, taking into consideration the age of the equipment and facilities involved, the process employed, capital expenditures, maintenance cost, technical feasibility, and the engineering aspects of the applicable noise control techniques in relation to the control achieved and the non-noise control environmental impact.

(f) **commissioner** means the Commissioner of the Department of Environmental Protection or his/her designated representative.

(g) **construction** means any, and all, physical activity at a site necessary or incidental to the erection, placement, demolition, assembling, altering, blasting, cleaning, repairing, installing, or equipping of buildings or other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include, but not be limited to, land clearing, grading, excavating, filling and paving.

(h) **daytime** means 7:00 a.m. to 10:00 p.m. local time.

(i) **director** means the Director of the Office of Noise Control in the Department of Environmental Protection.

(j) **emergency** means any occurrence involving actual or imminent danger to persons or damage to property which demands immediate action.

(k) **intrusion alarm** means a device with an audible signal which, when activated, indicates intrusion by an unauthorized person. Such alarm may be attached to, or within, any building, structure, property or vehicle.

(*l*) **ISO** means the International Organization for Standardization, or its successor body.

(m) **lawn care and maintenance equipment** means all engine or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner, and including, but not limited to, lawn mowers, riding tractors, snowblowers, and including equipment intended for infre-

quent service work in inhabited areas, typically requiring skilled operators, including, but not limited to, chain saws, log chippers or paving rollers.

(n) **nighttime** means 10:00 p.m. to 7:00 a.m. local time.

(o) **noise zone** means an individual unit of land or a group of contiguous parcels under the same ownership as indicated by public land records and, as relates to noise emitters, includes contiguous publicly dedicated street and highway rights-of-way, railroad rights-of-way and waters of the State.

(p) **office of noise control** means the office within the Department of Environmental Protection designated by the Commissioner to develop, administer and enforce the provisions of Chapter 442 of the Connecticut General Statutes.

(q) **OSHA** means the Occupational Safety and Health Act and any amendments thereto or successor regulations administered by the U.S. and Connecticut Departments of Labor or successor bodies.

(r) **person** means any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency, or political or administrative subdivision of the State or other legal entity of any kind.

(s) **public emergency sound signal** means an audible electronic or mechanical siren or signal device attached to an authorized emergency vehicle or within or attached to a building for the purpose of sounding an alarm relating to fire or civil preparedness. Such signal may also be attached to a pole or other structure.

(t) **SAE** means the Society of Automotive Engineers, Inc., or its successor body.

(u) **safety and protective devices** means devices that are designed to be used, and are actually used, for the prevention of the exposure of any person or property to imminent danger, including, but not limited to, unregulated safety relief valves, circuit breakers, protective fuses, back-up alarms required by OSHA or other state or federal safety regulations, horns, whistles or other warning devices associated with pressure buildup.

(v) **site** means the area bounded by the property line on or in which a source of noise exists.

(Effective June 15, 1978)

Sec. 22a-69-1.2. Acoustic terminology and definitions

(a) All acoustical terminology used in these Regulations shall be in conformance with the American National Standards Institute (ANSI), ''Acoustical Terminology,'' contained in publication S1.1 as now exists and as may be hereafter modified. The definitions below shall apply if the particular term is not defined in the aforesaid ANSI publication.

(b) **audible range of frequency** means the frequency range 20 Hz to 20,000 Hz which is generally considered to be the normal range of human hearing.

(c) **background noise** means noise which exists at a point as a result of the combination of many distant sources, individually indistinguishable. In statistical terms, it is the level which is exceeded 90% of the time (L_{90}) in which the measurement is taken.

(d) **continuous noise** means ongoing noise, the intensity of which remains at a measurable level (which may vary) without interruption over an indefinite period or a specified period of time.

(e) **decibel (dB)** means a unit of measurement of the sound level.

(f) **excessive noise** means emitter Noise Zone levels from stationary noise sources exceeding the Standards set forth in Section 3 of these Regulations beyond the boundary of adjacent Noise Zones.

(g) **existing noise source** means any noise source(s) within a given Noise Zone, the construction of which commenced prior to the effective date of these Regulations.

(h) **fluctuating noise** means a continuous noise whose level varies with time by more than 5 dB.

(i) **frequency** means the number of vibrations or alterations of sound pressure per second and is expressed in Hertz.

(j) **hertz (Hz)** means a unit of measurement of frequency formerly stated as, and numerically equal to, cycles per second.

(k) **impulse noise** means noise of short duration (generally less than one second), especially of high intensity, abrupt onset and rapid decay, and often rapidly changing spectral composition.

(*l*) **infrasonic sound** means sound pressure variations having frequencies below the audible range for humans, generally below 20 Hz; subaudible.

(m) $\mathbf{L_{10}}$ means the A-weighted sound level exceeded 10% of the time period during which measurement was made.

(n) $\mathbf{L_{50}}$ means the A-weighted sound level exceeded 50% of the time period during which measurement was made.

(o) $\mathbf{L_{90}}$ means the A-weighted sound level exceeded 90% of the time period during which measurement was made.

(p) **octave band sound pressure level** means the sound pressure level for the sound contained within the specified preferred octave band, stated in dB, as described in ANSI S1.6-1967: Preferred Frequencies and Band Numbers for Acoustical Measurements.

(q) **peak sound pressure level** means the absolute maximum value of the instantaneous sound pressure level occurring in a specified period of time.

(r) **prominent discrete tone** means the presence of acoustic energy concentrated in a narrow frequency range, including, but not limited to, an audible tone, which produces a one-third octave sound pressure level greater than that of either adjacent one-third octave and which exceeds the arithmetic average of the two adjacent one-third octave band levels by an amount greater than shown below opposite the center of frequency for the one-third octave band containing the concentration of acoustical energy.

⅓ Octave Band Center Frequency (Hz)	*dB*
100	16
125	14
160	12
200	11
250	9
315	8
400	7
500	6
630	6
800	5
1000	4
1250	4
1600	4
2000	3
2500	3

3150	3
4000	3
5000	4
6300	4
8000	5
10000	6

(s) **reference pressure** is 0.00002 Newtons per square meter (N/M^2), or 20 microPascals, for the purposes of these Regulations.

(t) **sound** means a transmission of energy through solid, liquid, or gaseous media in the form of vibrations which constitute alterations in pressure or position of the particles in the medium and which, in air, evoke physiological sensations, including, but not limited to, an auditory response when impinging on the ear.

(u) **sound analyzer** means a device, generally used in conjunction with a sound level meter, for measuring the sound pressure level of a noise as a function of frequency in octave bands, one-third octave bands or other standard ranges. The sound analyzer shall conform to Type E, Class II, as specified in ANSI S1.11-1971 or latest revision.

(v) **sound level** means a frequency weighted sound pressure level, obtained by the use of metering characteristics and the weighting A, B, or C as specified in ANSI, ''Specifications for Sound Level Meters,'' S1.4-1971 or latest revision. The unit of measurement is the decibel. The weighting employed must always be stated as dBA, dBB, or dBC.

(w) **sound level meter** means an instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels. The sound level meter shall conform to ANSI Specifications for Sound Level Meters S1.4-1971.

(x) **sound pressure level (SPL)** means twenty times the logarithm to the base ten of the ratio of the sound pressure in question to the standard reference pressure of 0.00002 N/M^2. It is expressed in decible units.

(y) **ultrasonic sound** means sound pressure variations having frequencies above the audible sound spectrum for humans, generally higher than 20,000 Hz; super-audible.

(z) **vibration** means an ascillatory motion of solid bodies of deterministic or random nature described by displacement, velocity, or acceleration with respect to a given reference point.

(Effective June 15, 1978)

Sec. 22a-69-1.3. Coordination with other laws

(a) Nothing in these Regulations shall authorize the construction or operation of a stationary noise source in violation of the requirements of any other applicable State law or regulation.

(b) Nothing in these Regulations shall authorize the sale, use or operation of a noise source in violation of the laws and regulations of the Connecticut Department of Motor Vehicles, the Federal Aviation Administration, the U.S. Environmental Protection Agency, or any amendments thereto.

(Effective June 15, 1978)

Sec. 22a-69-1.4. Incorporation by reference

(a) The specifications, standards and codes of agencies of the U.S. Government and organizations which are not agencies of the U.S. Government, to the extent that

they are legally incorporated by reference in these Regulations, have the same force and effect as other standards in these Regulations.

(b) These specifications, standards and codes may be examined at the Office of Noise Control, Department of Environmental Protection, State of Connecticut.

(c) Any changes in the specifications, standards and codes incorporated in these Regulations are available at the Office listed in (b) above. All questions as to the applicability of such changes should also be referred to this Office.

(Effective June 15, 1978)

Sec. 22a-69-1.5. Compliance with regulations no defense to nuisance claim

Nothing in any portion of these Regulations shall in any manner be construed as authorizing or legalizing the creation or maintenance of a nuisance, and compliance of a source with these Regulations is not a bar to a claim of nuisance by any person. A violation of any portion of these Regulations shall not be deemed to create a nuisance per se.

(Effective June 15, 1978)

Sec. 22a-69-1.6. Severability

If any provision of these Regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or applications of any other part of these Regulations which can be given effect without the invalid provisions or application; and to this end, the provisions of these Regulations and the various applications thereof are declared to be severable.

(Effective June 15, 1978)

Sec. 22a-69-1.7. Exclusions

These Regulations shall not apply to:

(a) Sound generated by natural phenomena, including, but not limited to, wind, storms, insects, amphibious creatures, birds, and water flowing in its natural course.

(b) The unamplified sounding of the human voice.

(c) The unamplified sound made by any wild or domestic animal.

(d) Sound created by bells, carillons, or chimes associated with specific religious observances.

(e) Sound created by a public emergency sound signal attached to an authorized emergency vehicle in the immediate act of responding to an emergency, as authorized by subsection (d) of Section 14.80 and Section 14-la of Chapter 246 of the General Statutes and all amendments thereto, or located within or attached to a building, pole or other structure for the purpose of sounding an alarm relating to fire or civil preparedness.

(f) Sound created by safety and protective devices.

(g) Farming equipment or farming activity.

(h) Back-up alarms required by OSHA or other State or Federal safety regulations.

(i) Sound created by any mobile source of noise. Mobile sources of noise shall include, but are not limited to, such sources as aircraft, automobiles, trucks, and boats. This exclusion shall cease to apply when a mobile source of noise has maneuvered into position at the loading dock, or similar facility, has turned off its engine and ancillary equipment, and has begun the physical process of removing the contents of the vehicle.

(Effective June 15, 1978)

Sec. 22a-69-1.8. Exemptions

Exempted from these Regulations are:

(a) Conditions caused by natural phenomena, strike, riot, catastrophe, or other condition over which the apparent violator has no control.

(b) Noise generated by engine-powered or motor-driven lawn care or maintenance equipment shall be exempted between the hours of 7:00 a.m. and 9:00 p.m. provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises therefrom.

(c) Noises created by snow removal equipment at any time shall be exempted provided that such equipment shall be maintained in good repair so as to minimize noise, and noise discharged from exhausts shall be adequately muffled to prevent loud and/or explosive noises therefrom.

(d) Noise that originates at airports that is directly caused by aircraft flight operations specifically preempted by the Federal Aviation Administration.

(e) Noise created by the use of property for purposes of conducting speed or endurance events involving motor vehicles shall be exempted but such exemption is effective only during the specific period(s) of time within which such use is authorized by the political subdivision or governmental entity having lawful jurisdiction to sanction such use.

(f) Noise created as a result of, or relating to, an emergency.

(g) Construction noise.

(h) Noise created by blasting other than that conducted in connection with construction activities shall be exempted provided that the blasting is conducted between 8:00 a.m. and 5:00 p.m. local time at specified hours previously announced to the local public, or provided that a permit for such blasting has been obtained from local authorities.

(i) Noise created by on-site recreational or sporting activity which is sanctioned by the state or local government provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises therefrom.

(j) Patriotic or public celebrations not extending longer than one calendar day.

(k) Noise created by aircraft, or aircraft propulsion components designed for or utilized in the development of aircraft, under test conditions.

(*l*) Noise created by products undergoing test, where one of the primary purposes of the test is evaluation of product noise characteristics and where practical noise control measures have been taken.

(m) Noise generated by transmission facilities, distribution facilities and substations of public utilities providing electrical powers, telephone, cable television or other similar services and located on property which is not owned by the public utility and which may or may not be within utility easements.

(Effective June 15, 1978)

Sec. 22a-69-1.9. Burden of persuasion regarding exclusions and exemptions

In any proceeding pursuant to these Regulations, the burden of persuasion shall rest with the party attempting to enforce the Regulations. Notwithstanding the foregoing, if an exclusion or exemption stated in these Regulations would limit an obligation, limit a liability, or eliminate either an obligation or a liability, the person who would benefit from the application of the exclusion or exemption shall have the burden of persuasion that the exclusion or exemption applies and that the terms of the exclusion or exemption have been met. The Department shall cooperate with

and assist persons in determining the application of the provisions of these Regulations.

(Effective June 15, 1978)

Sec. 22a-69-2. Classification of land according to use

Sec. 22a-69-2.1. Basis

Noisy Zone classifications shall be based on the actual use of any parcel or tract under single ownership as detailed by the Standard Land Use Classification Manual of Connecticut (SLUCONN).

(Effective June 15, 1978)

Sec. 22a-69-2.2. Multiple uses

Where multiple uses exist within a given Noise Zone, the least restrictive land use category for the Emitter and Receptor shall apply regarding the noise standards specified in Section 3 of these Regulations.

(Effective June 15, 1978)

Sec. 22a-69-2.3. Class A noise zone

Lands designated Class A shall generally be residential areas where human beings sleep or areas where serenity and tranquility are essential to the intended use of the land.

Class A Land Use Category. The land uses in this category shall include, but not be limited to, single and multiple family homes, hotels, prisons, hospitals, religious facilities, cultural activities, forest preserves, and land intended for residential or special uses requiring such protection.

The specific SLUCONN categories in Class A shall include:

1. Residential
11 Household Units*
12 Group Quarters
13 Mobile Home Parks and Courts
19 Other Residential
5. Trade
583 Residential Hotels
584 Hotels, Tourist Courts and Motels
585 Transient Lodgings
6. Services
651 Medical and Other Health Services; Hospitals
674 Correctional Institutions
691 Religious Activities
7. Cultural, Entertainment and Recreational
711 Cultural Activities
712 Nature Exhibitions
713 Historic and Monument Sites

*Mobile homes are included if on foundations

9. Undeveloped, Unused and Reserved Lands and Water Areas
92 Reserved Lands
941 Vacant Floor Area—Residential

(Effective June 15, 1978)

Sec. 22a-69-2.4. Class B noise zone

Lands designated Class B shall generally be commercial in nature, areas where human beings converse and such conversation is essential to the intended use of the land.

Class B Land Use Category. The land uses in this category shall include, but not be limited to, retail trade, personal, business and legal services, educational institutions, government services, amusements, agricultural activities, and lands intended for such commercial or institutional uses.

The specific SLUCONN categories in Class B shall include:

4. Transportation, Communication and Utilities
46 Automobile Parking
47 Communication
5. Trade
51 Wholesale Trade
52 Retail Trade - Building Materials
53 Retail Trade - General Merchandise
54 Retail Trade - Food
55 Retail Trade - Automotive Dealers and Gasoline Service Stations
56 Retail Trade - Apparel and Accessories
57 Retail Trade - Furniture, Home Furnishings and Equipment
58 Retail Trade - Eating, Drinking and Lodging - Except 583, 584, and 585
59 Retail Trade - N.E.C.*
6. Services
61 Finance, Insurance and Real Estate Services
62 Personal Services
63 Business Services—Except 637
64 Repair Services
65 Professional Services—Except 651
67 Government Services—Except 672, 674, and 675
68 Educational Services
69 Miscellaneous Services—Except 691
7. Cultural, Entertainment and Recreational
71 Cultural Activities and Nature Exhibitions—Except 711, 712, and 713
72 Public Assembly
73 Amusements
74 Recreational Activities
75 Resorts and Group Camps
76 Parks
79 Other, N.E.C.*

*Not Elsewhere Classified

8. Agriculture
81 Agriculture
82 Agricultural Related Activities
9. Undeveloped, Unused, and Reserved Lands and Water Area
91 Undeveloped and Unused Land Area
93 Water Areas
94 Vacant Floor Area—Except 941
99 Other Undeveloped Land and Water Areas, N.E.C.*

*Not Elsewhere Classified

(Effective June 15, 1978)

Sec. 22a-69-2.5. Class C noise zone

Lands designated Class C shall generally be industrial where protection against damage to hearing is essential, and the necessity for conversation is limited.

Class C Land Use Category. The land uses in this category shall include, but not be limited to, manufacturing activities, transportation facilities, warehousing, military bases, mining, and other lands intended for such uses.

The specific SLUCONN categories in Class C shall include:

2. Manufacturing — Secondary Raw Materials
3. Manufacturing — Primary Raw Materials
4. Transportation, Communications and Utilities — Except 46 and 47
6. Services
637 Warehousing and Storage Services
66 Contract Construction Services
672 Protective Functions and Related Activities
675 Military Bases and Reservations
8. Agriculture
83 Forestry Activities and Related Services
84 Commercial Fishing Activities and Related Services
85 Mining Activities and Related Services
89 Other Resource Production and Extraction, N.E.C.*

*Not Elsewhere Classified

(Effective June 15, 1978)

Sec. 22a-69-3. Allowable noise levels

Sec. 22a-69-3.1. General prohibition

No person shall cause or allow the emission of excessive noise beyond the boundaries of his/her Noise Zone so as to violate any provisions of these Regulations.

(Effective June 15, 1978)

Sec. 22a-69-3.2. Impulse noise

(a) No person shall cause or allow the emission of impulse noise in excess of 80 dB peak sound pressure level during the nighttime to any Class A Noise Zone.

(b) No person shall cause or allow the emission of impulse noise in excess of 100 dB peak sound pressure at any time to any Noise Zone.

(Effective June 15, 1978)

Sec. 22a-69-3.3. Prominent discrete tones

Continuous noise measured beyond the boundary of the Noise Zone of the noise emitter in any other Noise Zone which possesses one or more audible discrete tones shall be considered excessive noise when a level of 5 dBA below the levels specified in Section 3 of these Regulations is exceeded.

(Effective June 15, 1978)

Sec. 22a-69-3.4. Infrasonic and ultrasonic

No person shall emit beyond his/her property infrasonic or ultrasonic sound in excess of 100 dB at any time.

(Effective June 15, 1978)

Sec. 22a-69-3.5. Noise zone standards

(a) No person in a Class C Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

	Receptor			
	C	*B*	*A/Day*	*A/Night*
Class C Emitter to	70 dBA	66 dBA	61 dBA	51 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(b) No person in a Class B Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

Receptor

	Receptor			
	C	*B*	*A/Day*	*A/Night*
Class B Emitter to	62 dBA	62 dBA	55 dBA	45 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(c) No person in a Class A Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

	Receptor			
	C	*B*	*A/Day*	*A/Night*
Class A Emitter to	62 dBA	55 dBA	55 dBA	45 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(Effective June 15, 1978)

Sec. 22a-69-3.6. High background noise areas

In those individual cases where the background noise levels caused by sources not subject to these Regulations exceed the standards contained herein, a source shall be considered to cause excessive noise if the noise emitted by such source exceeds the background noise level by 5 dBA, provided that no source subject to the provisions of Section 3 shall emit noise in excess of 80 dBA at any time, and provided that this Section does not decrease the permissible levels of the other Sections of this Regulation.

(Effective June 15, 1978)

Sec. 22a-69-3.7. Existing noise sources

Existing noise sources constructed between the effective date of these Regulations and January 1, 1960 shall be provided a permanent five (5) dBA maximum noise level allowance over levels otherwise herein required regardless of subsequent changes in ownership or facility utilization processes at the location of the existing noise source. Existing noise sources constructed prior to 1960 shall be provided a permanent ten (10) dBA maximum noise level allowance over levels otherwise herein required regardless of subsequent changes in ownership or facility utilization processes at the location of the existing noise source. Additionally, all existing noise sources shall be provided twenty-four (24) months in order to achieve compliance with these Regulations if a notice of violation has been, or may be, issued to the source. This time period begins with the effective date of these Regulations, not with the date of the notice of violation.

(Effective June 15, 1978)

Sec. 22a-69-3.8. Adaptive reuse of existing buildings

Buildings and other structures that exist as of the effective date of these Regulations which have been remodeled or converted for adaptive reuse or which may be remodeled or converted at a future date shall be provided a permanent five (5) dBA maximum noise level allowance above the Emitter Class of the new use of the building over levels otherwise herein required.

(Effective June 15, 1978)

Sec. 22a-69-4. Measurement procedures

Acoustic measurements to ascertain compliance with these Regulations shall be in substantial conformity with standards and Recommended Practices established by professional organizations such as ANSI and SAE.

(a) Personnel conducting sound measurements shall be trained and experienced in the current techniques and principles of sound measuring equipment and instrumentation. The Commissioner shall establish sufficiently detailed measurement procedure guidelines specifying, but not necessarily being limited to, the following: The appropriate utilization of fast or slow sound level meter dampening when making sound level measurements, the rise time specified in microseconds for measuring impulse noise, the need for a whole circuit in such measurements, and the proper weighting to be used in measuring impulse noise.

(b) Instruments shall conform to the following standards of their latest revisions:

(i) ANSI S1.4-1971, ''Specifications for Sound Level Meters,'' Type 1 or 2.

(ii) ANSI S1.11-1966, ''Specifications for Octave, One-Half Octave and One-Third Octave Band Filter Sets,'' Type E, Class II.

(iii) If a magnetic tape recorder or a graphic level recorder or other indicating device is used, the system shall meet the applicable requirements of SAE Recommended Practice J184, ''Qualifying a Sound Data Acquisition System.''

(c) Instruments shall be set up to conform to ANSI S1.13-1971, ''Methods for the Measurement of Sound Pressure Levels.''

(d) Instrument manufacturer's instructions for use of the instruments shall be followed, including acoustical calibration of equipment used.

(e) The determination of L_{90} to ascertain background levels requires a statistical analysis. A graphic level recording and visual interpretation of the chart recording to determine the levels is an acceptable method. Instruments designed to determine the cumulative distribution of noise levels are also acceptable used either in the field or in the laboratory to analyze a tape recording. Dynamic visual estimations from a sound level meter are not an acceptable method for determining such levels. Sound level sampling techniques are acceptable and will often be the most practical to employ. Such a technique using Connecticut Noise Survey Data Form #101 with accompanying instructions is acceptable.

(f) In measuring compliance with Noise Zone Standards, the following short-term noise level excursions over the noise level standards established by these Regulations shall be allowed, and measurements within these ranges of established standards shall constitute compliance therewith:

Allowable levels above standards (dBA)	*Time period of such levels (minutes/hour)*
3	15
6	7½
8	5

(g) Measurements taken to determine compliance with Section 3 shall be taken at about one foot beyond the boundary of the Emitter Noise Zone within the receptors's Noise Zone. The Emitter's Noise Zone includes his/her individual unit of land or group of contiguous parcels under the same ownership as indicated by public land records. The Emitter's Noise Zone also includes contiguous publicly dedicated street and highway rights-of-way, railroads rights-of-way and waters of the State.

(Effective June 15, 1978)

Sec. 22a-69-5. Other provisions

Sec. 22a-69-5.1. Intrusion alarms

No person shall cause, suffer, allow or permit the operation of any intrusion alarm which, from time of activation of audible signal, emits noise for a period of time exceeding ten minutes when attached to any vehicle or thirty minutes when attached to any building or structure.

The repetition of activation of the audible signal of an intrusion alarm due to malfunction, lack of proper maintenance, or lack of reasonable care shall be considered excessive noise.

(Effective June 15, 1978)

Sec. 22a-69-6. Airport facilities

Sec. 22a-69-6.1. Extent of regulation

Airport facilities are subject to Section 3 to the extent not preempted by state or federal law or regulation.

(Effective June 15, 1978)

Sec. 22a-69-6.2. Reserved

(This subsection is reserved for possible future regulations regarding the assessment of, and long-range plans for, the reduction of airport facility noise impacts to the extent not preempted by state or federal law or regulation.)

(Effective June 15, 1978)

Sec. 22a-69-7. Variances and enforcement procedures

Sec. 22a-69-7.1. Variances

(a) Any person who owns or operates any stationary noise source may apply to the Commissioner for a variance or a partial variance from one or more of the provisions of these Regulations. Applications for a variance shall be submitted on forms furnished by the Commissioner and shall supply such information as he/she requires, including, but not limited to:

(i) Information on the nature and location of the facility or process for which such application is made.

(ii) The reason for which the variance is required, including the economic and technical justifications.

(iii) The nature and intensity of noise that will occur during the period of the variance.

(iv) A description of interim noise control measures to be taken by the applicant to minimize noise and the impacts occurring therefrom.

(v) A specific schedule of the best practical noise control measures, if any, which might be taken to bring the source into compliance with those Regulations from

which a variance is sought, or a statement of the length of time during which it is estimated that it will be necessary for the variance to continue.

(vi) Any other relevant information the Commissioner may require in order to make a determination regarding the application.

(b) Failure to supply the information required by the form furnished by the Commissioner shall be cause for rejection of the application unless the applicant supplies the needed information within thirty (30) days of the written request by the Commissioner for such information.

(c) No variance shall be approved unless the applicant presents adequate proof to the Commissioner's satisfaction that:

(i) Noise levels occurring during the period of the variance will not constitute a danger to the public health; and

(ii) Compliance with the Regulations would impose an arbitrary or unreasonable hardship upon the applicant without equal or greater benefits to the public.

(d) In making a determination on granting a variance, the Commissioner shall consider:

(i) The character and degree of injury to, or interference with, the health and welfare or the reasonable use of property which is caused or threatened to be caused.

(ii) The social and economic value of the activity for which the variance is sought.

(iii) The ability of the applicant to apply best practical noise control measures, as defined in these Regulations.

(e) Following receipt and review of an application for a variance, the Commissioner shall fix a date, time and location for a hearing on such application.

(f) The Commissioner shall cause the applicant to publish at his/her own expense all notices of hearings and other notices required by law, including, but not limited to, notification of all abutters of record.

(g) Within sixty (60) days of the receipt of the record of the hearings on a variance application, the Commissioner shall issue his/her determination regarding such application. All such decisions shall briefly set forth the reasons for the decision.

(h) The Commissioner may, at his/her discretion, limit the duration of any variance granted under these Regulations. Any person holding a variance and needing an extension of time may apply for a new variance under the provisions of these Regulations. Any such application shall include a certification of compliance with any condition imposed under the previous variance.

(i) The Commissioner may attach to any variance any reasonable conditions he/she deems necessary and desirable, including, but not limited to:

(i) Requirements for the best practical noise control measures to be taken by the owner or operator of the source to minimize noise during the period of the variance.

(ii) Requirements for periodic reports submitted by the applicant relating to noise, to compliance with any other conditions under which the variance was granted or to any other information the Commissioner deems necessary.

(j) The filing of an application for a variance shall operate as a stay of prosecution, except that such stay may be terminated by the Commissioner upon application of any party if the Commissioner finds that protection of the public health so requires.

(k) In any case where a person seeking a variance contends that compliance with any provision of these Regulations is not practical or possible because of the cost involved either in installing noise control equipment or changing or curtailing the operation in any manner, he/she shall make available to the Commissioner such financial records as the Commissioner may require.

(*l*) A variance may include a compliance schedule and requirements for periodic reporting of increments of achievement of compliance.

(Effective June 15, 1978)

Sec. 22a-69-7.2. Transference

No person who owns, operates or maintains a stationary noise source shall transfer a variance from one site to another site.

(Effective June 15, 1978)

Sec. 22a-69-7.3. Responsibility to comply with applicable regulations

Approval of a variance shall not relieve any person of the responsibility to comply with any other applicable Regulations or other provisions of federal, state or local laws, ordinances or regulations.

(Effective June 15, 1978)

Sec. 22a-69-7.4. Violations and enforcement

(a) No person shall violate or cause the violation of any of these Regulations.

(b) Each day on which a violation occurs or continues after the time for correction of the violation given in the order has elapsed or after thirty (30) days from the date of service of the order, whichever is later, shall be considered a separate violation of these Regulations.

(c) Qualified personnel of the Office of Noise Control shall, with or without complaints, conduct investigations and ascertain whether these Regulations have been complied with. Whenever such personnel determines that any of these Regulations have been violated or there has been a failure to comply therewith, they shall make and serve upon the person(s) responsible for the violation a written order specifying the nature of the violation or failure and affording a reasonable time for its correction or remedy. Prior to the issuance of such order, such personnel shall make a reasonable effort in light of the circumstances to correct a violation or achieve compliance by means of conference, conciliation and persuasion as required by statute. Unless the person(s) against whom an order has been served files a written answer thereto with the Commissioner within thirty (30) days after the date of service of the order and requests a hearing thereon, such order shall become final and effective in accordance with the Connecticut Administrative Procedures Act and the rules, practices, and procedures of the Department of Environmental Protection.

(Effective June 15, 1978)

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Repealed, March 23, 1988.

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Grants for the Protection of Coves and Embayments

Sec. 22a-113b-1. Grants for the protection of coves and embayments

(a) **Definitions**

(1) The definitions of the following terms used in this section are contained in section 22a-93 of the general statutes: commissioner; estuarine embayments; and municipality.

(2) As used in this section:

''Department'' means the Department of Environmental Protection;

''Project'' means an activity or action conducted in an embayment to solve its environmental problems.

(b) **Eligibility**

(1) In order to be eligible for funding pursuant to section 22a-113a of the general statutes, a project must be consistent with the policies and standards established in chapter 444 of the general statutes and the municipality's coastal management program approved in accordance with the provisions of sections 22a-101 to 22a-104, inclusive, of the general statutes; and

(2) Eligibility for funding pursuant to section 22a-113a of the general statutes will be determined on the basis of the degree to which the project meets the following criteria:

(A) the project will solve existing environmental problems affecting the health and general condition of an embayment as defined in section 22a-93 (7) (G) of the general statutes;

(B) there exists or will exist public access to the shoreline of the embayment;

(C) there is a clear demonstration of the causes of and solutions to the environmental problems to be addressed by the project;

(D) upland causes of the environmental problems in the embayment have been addressed independently of the project or will be addressed by the project.

(c) **Level of Funding**

The Commissioner shall review the project based on eligibility requirements specified in subsection (b) of this section and the evaluation criteria set forth in subsection (b) of section 22a-113a of the general statutes. The grant shall not exceed fifty percent of the allowable costs of the project as set forth in subsection (d) of this section. The Commissioner may request that a municipality provide evidence of financial commitment prior to awarding a grant.

(d) **Allowable and Unallowable Costs**

(1) Allowable project costs are those costs which are associated with the planning, designing, constructing and monitoring of the project as specified in subsection (a) of section 22a-113a of the general statutes.

(2) Unallowable project costs are those costs which are not necessary for the implementation, construction or monitoring of the project. Such costs shall include but are not limited to:

(A) any costs not specifically approved in advance by the Commissioner;

(B) studies whose primary purpose is to determine the existence of environmental problems;

(C) the approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project and the interest on them;

(D) the cost of operation, maintenance and upkeep of the project;

(E) costs for correcting activities located solely on upland areas which are causing degradation in the embayment. Such activities include but are not limited to failing

septic systems, agricultural runoff, leaking underground storage tanks or stormwater runoff;

(F) costs of legal representation associated with the project;

(G) the costs of acquiring land in fee simple or by lease or easement necessary for the implementation of the project unless specifically approved by the Commissioner;

(H) any other costs deemed unnecessary or excessive by the Commissioner.

(e) **Grant Application**

(1) The grant applications shall be on a form prescribed by the Commissioner and shall include the following:

(A) a letter of application signed by the chief executive officer of the applying municipality;

(B) the name and location of the estuarine embayment in which the project is to be conducted;

(C) a map of the entire embayment showing the location of the principal coastal resources as defined in section 22a-93 (7) of the general statutes and the location of nearby public lands, public access points and the project;

(D) the purpose of the project;

(E) a detailed description of the nature and extent of the environmental problem(s) and their causes. Copies of all studies that document the environmental problems shall be submitted;

(F) a detailed description of the proposed work;

(G) evidence to support the eligibility requirements specified in subsection (b) of section 22a-113b-1 and the evaluation criteria set forth in subsection (b) of section 22a-113a of the general statutes;

(H) identification and description of all public access points;

(I) a description of the anticipated short and long term impacts including but not limited to environmental, recreational, and navigational impacts resulting from implementation of the proposed solution;

(J) a description of any upland problems contributing to the degradation of the embayment including but not limited to controlling sedimentation and stormwater runoff, controlling the density of development, controlling non-point sources of pollution and a description of the solutions to eliminate such problems;

(K) a listing of state and federal licenses, permits or certificates which have been obtained or which will be secured for the project;

(L) a listing of local permits which have been obtained or which are being sought for the project;

(M) a description and estimate of the pre- and post-monitoring, design, and implementation and construction costs;

(N) a description of the manner in which local costs will be financed;

(O) evidence that the project is consistent with the requirements of sections 25-68b to 25-68h, inclusive, of the general statutes;

(P) any other information which the municipality considers relevant;

(Q) any other information that the Commissioner deems necessary.

(f) **Terms of Funding Assistance**

(1) The Commissioner may condition grants as he or she deems necessary.

(2) No grant assistance shall be allowed for any work performed before a grant award without prior written approval of the Commissioner.

(g) **Grant Procedures**

Upon selection of a project by the Commissioner, the Commissioner will transmit the grant agreement contract to the municipality for its approval in accordance with

subsection (c) of section 22a-113a of the general statutes. The grant agreement contract must be executed by the municipality and returned within a timely fashion. The grant agreement contract shall set forth the approved project scope, budget (including state share), the total project cost, the approved commencement and completion date for the project or major phases thereof. The grant agreement contract shall set forth the amount of state reimbursement and schedule of payments. The state grant will be limited to the state's share of the allowable costs as set forth in subsection (d) of section 22a-113b-1. Matching funds from the municipality may be incorporated in grants by reference.

(Effective July 27, 1987)

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Hazardous Waste Facilities Siting

Sec. 22a-116-1. Hazardous waste facilities siting regulations

This section shall be known and may be cited as ''Hazardous Waste Facilities Siting Regulations.''

(Effective April 16, 1982)

Sec. 22a-116-2. Definitions

The following terms not defined in section 22a-115 of the Connecticut General Statutes are defined as follows:

''Department'' or ''DEP'' means the department of environmental protection.

''Existing hazardous waste facility'' means a hazardous waste facility in operation, or which had received all necessary state permits for hazardous waste disposal as of July 1, 1981.

''New hazardous waste facility'' or ''new facility'' means a hazardous waste facility which had not received all necessary state permits for hazardous waste disposal prior to July 1, 1981.

''Siting permit'' means a single document consolidating all DEP permits, approvals, licenses, and authorizations necessary for the construction or modification of a hazardous waste facility.

(Effective April 16, 1982)

Sec. 22a-116-3. Permits for hazardous waste facilities

(a) **Requirements for permits.** All DEP permits, approvals, licenses, or authorizations necessary to initiate construction or modification of a hazardous waste facility and any person applying for any DEP required permits, approvals, licenses, or authorizations shall be subject to this section.

(b) **Application for siting permit.**

(1) Application for each siting permit shall be made by the owner or operator of the facility on forms furnished by the commissioner. Each application shall include all information required by statute and by the most current departmental regulations regarding such facility; however, nothing in these regulations shall prevent the commissioner from requiring additional information concerning an application if he determines that such additional information is necessary.

(2) An application will not be deemed to have been received by the department until all papers and documents required by statute, regulation or request of the commissioner in support of the application have been submitted in proper form. The department shall determine within sixty (60) days of submission of a prepared application whether it is complete, and shall so notify the applicant.

(3) Upon a determination that an application is incomplete, the applicant may resubmit the application with the additional information required by the department. The department shall determine within sixty (60) days of such resubmission whether the application is complete and shall so notify the applicant. Upon resubmission, the department may require further information only if

(A) such information is required by statute or regulation, or

(B) the need for the additional information was not apparent at the time of the prior determination that the application was incomplete.

(c) **Public hearing.** The commissioner shall hold a public hearing on an application, such hearing to commence not sooner than thirty (30) days and no later than sixty (60) days after his determination that an application is complete. Notice of hearing shall be published no fewer than ten (10) days before the date set for the

hearing in a newspaper having general circulation in the town where the facility is to be located.

(d) **Siting permit decision.**

(1) The commissioner shall consider all evidence offered at any public hearing, any reports from local, state, and federal agencies, all relevant facts and circumstances, and any additional requested information in making his tentative determination on a siting permit application. Such a determination shall be made by the commissioner within ninety (90) days of the close of the public hearing. A tentative determination to issue a siting permit shall be published by the commissioner in the Connecticut Law Journal within thirty (30) days of such a decision.

(2) The commissioner shall within thirty (30) days following the issuance of a certificate of public safety and necessity by the Connecticut siting council, render a final siting permit decision.

(e) **Denial of a siting permit.** A siting permit may be denied if the commissioner determines that:

(1) The engineering information and any other information submitted by the applicant indicates that the hazardous waste facility will not be constructed and operated in compliance with applicable statutes or regulations; or

(2) The facility is not consistent with all applicable regulations of the department of environmental protection.

(f) **Minor amendment of siting permits.** The commissioner may amend a siting permit for changes in the facility practices or equipment that would not in his judgment significantly alter the nature of the facility or the impact on the environment.

(g) **Conditions applicable to the siting permit.** A siting permit shall be effective for a fixed term not to exceed five (5) years. The commissioner may add such additional conditions to any siting permit as he deems necessary based upon the circumstances of the particular application.

(h) **Reapplication for and renewal of siting permits.** The procedure for obtaining a renewal of a siting permit is detailed in section 22a-7-4 of the Administrative Regulations of Connecticut State Agencies except that the commissioner may waive the one hundred twenty (120) calendar day requirement for good cause shown.

(i) **Revocation or suspension.** A siting permit may be revoked or suspended for failure to comply with the terms of the permit or violation of any applicable regulation or statute.

(j) **Transferability.** The holder of a siting permit may not transfer it without prior written permission of the commissioner.

(Effective April 16, 1982)

Sec. 22a-116-4. Construction and operation

All owners and operators of hazardous waste facilities are subject to the construction and operating requirements of sections 25-54cc(c)-23 through 33 and sections 25-54cc(c)-35 through 48 of the Regulations of Connecticut State Agencies and any other regulations of the department not inconsistent therewith.

(Effective April 16, 1982)

Sec. 22a-116-5. Closure and post-closure

All owners and operators of hazardous waste facilities are subject to closure and post-closure requirements of sections 25-54cc(c)-34 and 35 of the Regulations of Connecticut State Agencies.

(Effective April 16, 1982)

Sec. 22a-116-6. Post-closure use

At the conclusion of the post-closure period, the commissioner shall hold a hearing at which he will receive all information relevant to the future use of the closed hazardous waste facility. This information shall include all pertinent public and private records as well as testimony from the general public. A decision on any reasonable alternative use shall be made within ninety (90) days of the close of the hearing record.

(Effective April 16, 1982)

Sec. 22a-116-7. Disposal facility trust fund

By May first of each year, the commissioner shall determine the amount to be paid into the disposal facility trust fund for the following fiscal year by each hazardous waste facility. This sum shall be due to the commissioner in two equal installments on the following July 1 and January 1. The commissioner shall make available the derivation of the particular assessment for each facility.

(Effective April 16, 1982)

Sec. 22a-116-8. Oversight and monitoring

By May first of each year, the commissioner shall estimate the probable cost to the department of environmental protection of proper oversight and monitoring for the following fiscal year of each hazardous waste facility. This sum shall be due to the commissioner on July 1 of that year and shall be made a condition of the siting permit.

(Effective April 16, 1982)

Sec. 22a-116-9. Cease and desist orders and emergency orders

A cease and desist order and/or an emergency order shall become effective upon service by the commissioner. Following service of any such order, subsequent proceedings shall proceed in accordance with sections 22a-8-10 and 11 of the Regulations of Connecticut State Agencies.

(Effective April 16, 1982)

Sec. 22a-116-10. Public availability of information

(a) Any records, reports or other information obtained by the commissioner or any file with the department shall, pursuant to the provisions of sections 1-15, and 1-18a through 1-21k inclusive of the Connecticut General Statutes as amended, be made available to the public.

(b) The commissioner, when he deems it appropriate, may require any person requesting information under this section to pay the cost of reproducing such information.

(Effective April 16, 1982)

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Hazardous Waste Management Facility Siting

Sec. 22a-116-B-1. Purpose, scope, and applicability

These regulations set forth the requirements, standards and application procedures applicable to the grant or denial, amendment, transfer, suspension, revocation, and enforcement of certificates of public safety and necessity by the Connecticut Siting Council required for the siting of hazardous waste facilities. These regulations are promulgated pursuant to Title 22a, chapter 445, of the Connecticut General Statutes; and Title 4, chapter 54, of the Connecticut General Statutes. Additional regulations governing procedures to be followed by the Connecticut Siting Council for hazardous waste proceedings are promulgated pursuant to Title 16, chapter 277a, of the Connecticut General Statutes, and appear in Sections 16-50j and 16-50*l* of the Regulations of Connecticut State Agencies. Additionally, requirements relating to minimum distances between active portions of hazardous waste facilities and other land uses appear in Section 22a-122-1 of the Regulations of Connecticut State Agencies.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-2. Definitions

As used in Sections 22a-116-B-1 to 22a-116-B-11, inclusive, of the Regulations of Connecticut State Agencies and Section 22a-122-1 of the Regulations of Connecticut State Agencies:

(1) ''Active Part'' for the purposes of minimum distance requirements set forth in Section 22a-122-1 of the Regulations of Connecticut State Agencies means that portion of a hazardous waste facility where handling, storage, treatment, recovery, or disposal of hazardous waste will be, is being, or has in the past been conducted;

(2) ''Aquifer'' means a geologic formation, group of formations, or part of a formation capable of yielding a usable amount of ground water to wells or springs;

(3) ''Certificate'' means the certificate of public safety and necessity required by Section 22a-117 of the Connecticut General Statutes to commence construction or modification of a hazardous waste facility;

(4) ''Closure Period'' means the first 180 days after the hazardous waste facility receives its final volume of hazardous waste or any other period fixed by the Council;

(5) ''Construction'' means the fabrication, erection, installation, or excavation of a hazardous waste facility which does not constitute a modification;

(6) ''Container'' means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled;

(7) ''Groundwater'' means water present in the zone of saturation or an aquifer;

(8) ''Incinerator'' means an enclosed device using controlled flame combustion, the primary purpose of which is to thermally break down hazardous waste. Examples of incinerators are rotary kiln, fluidized bed, and liquid injection incinerators;

(9) ''Landfill'' means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well;

(10) ''Land treatment facility'' means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure;

(11) ''Local project review committee'' means the committee which may be established pursuant to Section 22a-127 of the Connecticut General Statutes;

(12) ''Management'' means the treatment, disposal, or long term storage of hazardous waste;

(13) ''Neighboring municipality'' means any municipality which: (A) shares a common border with the municipality within which the largest portion of the proposed facility is located; (B) occupies any area within a ten-mile radius of the proposed facility site; or (C) petitions the Council pursuant to Section 22a-116-B-5 of the Regulations of Connecticut State Agencies for consideration as the neighboring municipality likely to be most affected by the proposed facility;

(14) ''Operator'' means the person responsible for the overall operation of a facility;

(15) ''Owner'' means the person who owns a facility or part of a facility;

(16) ''Surface impoundment'' or ''impoundment'' means a facility or part of facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials, although it may be lined with man-made materials, which is designated to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons;

(17) ''Surface water'' means the tidal waters, harbors, estuaries, rivers, brooks, watercourses, waterways, lakes, ponds, springs, marshes, drainage systems, and all other surfaces, bodies, or accumulations of water, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof;

(18) ''Tank'' means a stationary device designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials which provide structural support;

(19) ''Thermal treatment'' means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge;

(20) ''Transferee'' means a person who becomes an owner or operator after a certificate has been issued for the facility;

(21) ''Waste pile'' or ''pile'' means any noncontainerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-3. Application procedure

(a) **Who shall apply.**

(1) The owner or operator of a proposed facility subject to the requirement of certification under Section 22a-117 of the Connecticut General Statutes shall apply to the Council for a certificate pursuant to the application provisions of Section 22a-118 of the Connecticut General Statutes. When a proposed facility is to be owned by one person, but operated by another person, both owner and operator, if known at the time of filing, must sign the application.

(b) **Public notice.**

In addition to the public notice requirements of subsection (e) of Section 22a-118 of the Connecticut General Statutes, such notice shall contain the following sentence: ''The chief elected official of any municipality which wishes to be represented on the Council as the most affected neighboring municipality may apply within 20 days for such status to the Council in accordance with Section 22a-116-B-4 of the Regulations of Connecticut State Agencies.''

(c) **Completeness review.**

(1) No certificate of public safety and necessity shall be granted to any person until a complete application containing all information deemed relevant by the Council has been filed. Relevant information shall at a minimum include that listed in Section 22a-118 of the Connecticut General Statutes and Section 22a-122-1 of the Regulations of Connecticut State Agencies, unless an explanation of irrelevancy is provided for any item omitted from an application, along with a description of siting criteria and the narrowing process by which other possible sites were considered and eliminated. The Council will reserve final judgment of an item's relevancy.

(2) As soon as practicable after receipt of an application, the Council shall notify the applicant in writing as to the completeness of the application. If an applicant fails or refuses to correct any deficiencies in the manner directed and within the time prescribed by the Council, the application may be denied and rejected for lack of proper submission.

(3) A determination by the Council that an application is complete at the initiation of the certification process shall not preclude the Council from requiring the applicant to submit additional information subsequently determined to be necessary for a proper and complete evaluation of the proposed hazardous waste facility.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-4. Designation of most affected neighboring municipality

(a) **Petition.** For the purposes of ad hoc representation on the council and on the local project review committee, any municipality may petition the council in writing for consideration as the neighboring municipality likely to be most affected by the proposed facility. Such a petition shall be filed no later than 20 days after an application for a certificate is filed with the council and shall specifically indentify the reasons and provide supporting data, if available, as to why the municipality believes it should be designated as the most affected neighboring municipality.

(b) **Considerations.**

No sooner than 20 days and no later than 30 days after receiving an application for a certificate, the permanent members of the Council shall determine the neighboring municipality likely to be most affected by the proposed facility. In making its determination, the Council may consider any relevant information contained in the application for the certificate or in petitions filed by municipalities pursuant to this section. The Council shall, at a minimum, give reasonable consideration to the following information:

(1) description and location of the proposed facility and proximity to neighboring municipalities;

(2) maps from the Department of Energy and Environmental Protection review regarding air quality and movement, and surface and groundwater conditions and movement, including proximity to water company facilities and property;

(3) human population density for the areas of the proposed facility, including neighboring municipalities; and

(4) traffic data, including road and transportation access.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-5. Fees and assessments

(a) **Payment.**

All application fees required by the Council for a certificate of public safety and necessity for a hazardous waste facility or modification shall be paid to the Council at the time such application is filed.

(b) **Fee schedule.**

The fee schedule for a certificate for new hazardous waste facilities defined in Section 22a-115 of the Connecticut General Statutes or the modification of existing facilities shall be 1% of estimated construction cost, including land, but not less than $5,250 and not more than $100,250. The fee for each application for a certificate described in Section 22a-117 of the Connecticut General Statutes shall be used for the administrative expenses of the Council and its staff incurred in processing the application. In the event a hearing shall be held for such application, assessments of the applicant during the proceeding, or thereafter, shall be made for the expenses of the proceeding, and shall be in addition to any fee paid pursuant to this section. The amount of any fees and assessments paid pursuant to this section which are in excess of the actual expenses of the Council in reviewing and acting upon the application shall be refunded within 180 days after all Council obligations regarding the application are resolved.

(c) **Amendment assessment.**

The costs incurred by the Council in considering and application for an amendment of a certificate of public safety and necessity issued pursuant to Section 22a-117 of the Connecticut General Statutes shall be assessed to the applicant within 180 days after all Council obligations regarding the application are resolved and shall not exceed the actual costs incurred in processing, reviewing, and deciding such application.

(d) **Declaratory ruling fee.**

The fee for each petition for a declaratory ruling pursuant to Section 16-50j-39 of the Regulations of State Agencies shall be $625. In the event that a hearing shall be held for a petition for declaratory ruling, assessments on applicants shall be made for expenses incurred and during the proceeding and shall be in addition to any fee paid pursuant to this section.

(e) **Declaratory ruling field inspections.**

For a petition for a declaratory ruling regarding a hazardous waste facility, the person submitting such request or petition shall make payment of a fee of $625 to the Council for a field inspection. This fee shall be paid within 30 days after the Council's inspection and shall be in addition to any fee paid pursuant to this section.

(f) **D&M field inspections.**

Expenses incurred for field inspections in reviewing the D&M plan of a hazardous waste facility shall be billed quarterly to the applicant.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-6. Local project review grant

(a) **Deposit.**

Upon the filing of an application with the Council, or thereafter if project costs are revised, the applicant shall deposit with the Council for the local project review grant an amount calculated as 1% of the total project costs, but not less than $1,250 and not more than that authorized by Section 22a-127 of the Connecticut General Statutes.

(b) **Disbursement.**

Upon the filing by the local project review committee established pursuant to Section 22a-127 of the Connecticut General Statutes of receipts for expenses for technical assistance including professional, environmental, scientific, financial and legal assistance incurred by such committee for its review of the proposed hazardous waste facility, the Council shall reimburse the local project review committee a

sum not exceeding that deposited by the applicant pursuant to subsection (a) of this section.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-7. Rendering a decision

(a) **Requirements for written decision.**

(1) Within twelve months of receipt of a complete application, the Council shall render its decision upon the record by an affirmative vote of not less than seven Council members either granting or denying the application as filed, or granting it upon such terms, limitations, or conditions as the Council may deem appropriate. The twelve month time limit may be extended by 180 days by agreement of the Council and the applicant.

(2) The Council shall file, with its decision, an opinion stating in full the reasons for its decision. The decision shall include a statement describing the items of negotiation between the applicant and local project review committee which the Council has accepted and incorporated into any approval and those negotiated items it has rejected and the reasons therefor.

(3) The Council shall file, with its decision, copies of the reports on negotiations filed by the applicant and the local project review committee, and the record of any Council meeting held with the applicant and committee.

(b) **Considerations for decision.**

(1) In making its decision to grant or deny a certificate, the Council shall, consistent with applicable requirements of Sections 4-166 to 4-185, inclusive, of the Connecticut General Statutes, consider among other relevant facts and circumstances, the following factors:

(A) The impact of the proposed facility on the municipality and affected geographic area in which it is to be located in terms of public health, safety, and welfare including, but not limited to:

(i) The protection of the public and the environment from risk and impact of accident during transportation of hazardous waste;

(ii) The protection of the public and the environment from risk and impact of fires and explosions from improper storage or disposal methods;

(iii) The protection of the public and the environment from risk and impact of exposure of persons to hazardous wastes and their degradation products during facility operation and after its operational life;

(iv) The degree of consistency of the proposed facility with local and regional land use plans and regulations and the state conservation and development plan in effect at the time the applicant applies to the commissioner for the environmental licenses, permits or approvals necessary to construct and operate the facility, and with existing and proposed development in the area;

(v) The protection of the public and the environment from adverse impacts including but not limited to, adverse economic and environmental impacts of the facility during construction and operation, and after its operational life;

(vi) The protection of the public and the environment from risk and impact by the proposed facility on public and private drinking water supplies; and

(vii) The protection of the public and the environment from risk and impact by the proposed facility on scenic, historic and recreational areas; wetlands; flood plains; wildlife areas; habitat for endangered species; and other environmentally sensitive areas.

(B) The population density in the area of the proposed facility and its proximity to residential areas.

(C) The public benefits of the proposed hazardous waste facility including, but not limited to:

(i) The need for the additional disposal capacity provided by the facility;

(ii) The energy and resource recovery benefits, if any, which will be derived from the facility;

(iii) The economic benefit of the facility to the state and its citizens;

(iv) The capability of the proposed facility to accommodate hazardous wastes which would otherwise be disposed of in a less environmentally suitable site or manner;

(v) Economic incentives and benefits which will accrue to the municipality in which the proposed facility is to be located; and

(vi) Any aspects of the proposed facility which would enhance environmental quality.

(D) The extent to which the location of the facility minimizes the need to transport hazardous wastes long distances.

(E) The extent to which any reasonably available alternative disposal method or site minimizes detriment to the public health or safety, or the quality of the environment.

(F) The applicant's qualifications and previous experience with hazardous waste disposal, as well as the applicant's financial capabilities.

(G) Whether the applicant has prepared, and agreed to implement, an environmentally sound development and management plan which includes all elements required by Section 22a-116-B-9 of the Regulations of Connecticut State Agencies.

(H) Whether the applicant complies with the minimum distances between active parts of the facility and other land uses established pursuant to Section 22a-122-1 of the Regulations of Connecticut State Agencies.

(2) The Council may give such consideration to other state laws, municipal ordinances, and regulations as it shall deem appropriate.

(3) In making its decision as to whether or not to issue a certificate, the Council shall in no way be limited by the fact that the applicant may have already acquired land or an interest therein or any necessary permits, certificates, or orders for the purpose of constructing the facility which is the subject of its application.

(c) **Findings required for the issuance of a certificate.**

The Council shall not grant a certificate unless it finds and determines:

(1) That there is a public need for the facility and explains the basis of such need.

(2) The nature of the probable environmental impact of the facility, including but not limited to impacts due to the construction, operation, transportation of wastes to, and closure and post-closure provisions for the facility.

(3) In the case of a proposed land disposal facility, that there is no other feasible alternative disposal method available.

(4) Every significant single and cumulative adverse effect on and conflict with state policies on the subjects listed below and reasons why such adverse effects or conflicts are not sufficient for denial of the certificate:

(A) The natural environment;

(B) The public health and safety;

(C) Ecological balance;

(D) Scenic, historic, and recreational values;

(E) Forests and parks;

(F) Air and water purity including impact on present and future sources of water supply.

(5) That the applicant meets the financial responsibility requirements set forth in Section 22a-122(d) of the Connecticut General Statutes and in Sections 22a-116-B-1 to 22a-116-B-11 of the Regulations of Connecticut State Agencies.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-8. Transferability of certificates

(a) No certificate may be transferred without the approval of the permanent Council.

(b) Any person desiring to transfer a certificate shall jointly submit with the proposed transferee an application to the Council on such forms as may be prescribed from time to time by the permanent Council members. Such application shall, at a minimum, include the date on which such transfer was agreed upon by the parties to the transfer, an explanation of the reasons for the proposed transfer, and the same information about the transferee which is required of an applicant for a certificate by Section 22a-118 of the Connecticut General Statutes.

(c) The proposed transferee shall agree, in writing, to comply with the terms, limitations, and conditions contained in the certificate.

(d) The permanent Council shall not approve any such transfer if it finds:

(1) That such transfer was contemplated at or prior to the time the certificate was issued and that such fact was not adequately disclosed during the certification proceeding; or

(2) That the transferee lacks the financial, technical, or management capabilities to comply fully with the terms, limitations, or conditions of the certificate.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-9. Development and management plan

(a) **Purpose.**

The Council may require the preparation of a full or partial D&M plan for any certificated hazardous waste facility or any modification to a hazardous waste facility, where the preparation of such a plan would help to protect the health and safety of Connecticut's citizens and the environmental and economic interests of the state.

(b) **Procedure for preparation.**

The D&M plan shall be prepared by the applicant in consultation with Council staff.

(c) **Timing of the plan.**

The D&M plan shall be submitted to the Council and all parties in one complete filing. The D&M plan shall be approved, modified or denied by the Council not later than 60 days of receipt of it and prior to the commencement of construction.

(d) **Elements of a D&M plan.**

A D&M plan shall be a precise and complete description of the site and facility to be built and shall include, but not be limited to, the following information:

(1) The original application as revised by the applicant during the proceeding showing all additions, deletions, and changes, with page references, to the original proposal;

(2) A separate statement of the proposed methods, equipment, and schedule for construction or for each section of construction if construction is to continue through the life of the facility, with descriptions of possible adverse construction impacts and methods of minimizing or mitigating such impact;

(3) A description of the effects of construction on site characteristics, such as the effects of grading on surface drainage, and of soil removal or compaction on erosion, permeability and surface drainage;

(4) A statement of the management and administrative program for the operation of the proposed facility;

(5) The names and qualifications of supervisors assigned to the construction project;

(6) The identity of the person to be responsible for operation and a resume of that person's qualifications and experience; and

(7) A statement of the number, duties, qualifications, and experience of all personnel job classifications to be involved in the processing, treatment, transfer, storage, recovery, or disposal of hazardous waste.

(e) **Supplemental requirements.**

(1) Notices and reports of construction.

(A) The applicant shall provide the Council, in writing, with a minimum of two weeks advance notice of the beginning of:

(i) clearing, road construction, and site preparation; and

(ii) facility construction or each section of facility construction.

(B) The applicant shall provide the Council, in writing, with a monthly construction progress report indicating:

(i) changes and deviations from the approved D&M plan;

(ii) any notices required by and provided to other state agencies; and

(iii) the status of construction schedule.

(2) Significant D&M plan changes.

(A) The certificate holder shall notify the Council whenever a significant change of the approved D&M plan is anticipated. The certificate holder shall not implement such change without prior approval of the Council.

(B) A significant change in the D&M plan shall be any change in:

(i) the location of the facility or its components on the site;

(ii) the proposed grade and drainage characteristics of the site;

(iii) the design of the facility or its component structure;

(iv) a permit required to be considered by the Council in its decision that is issued by the Department of Energy and Environmental Protection for discharge to ground water, surface water, or air;

(v) proposed operation or management of the facility that may adversely affect the environment or the health and safety of employees or the general public; or

(vi) a condition required by the decision and order. Routine maintenance or replacement of parts with equivalent parts shall not be considered a significant change requiring approval.

(C) The Council shall review proposed changes and shall approve, modify, or disapprove the changes not later than 60 days.

(3) Final report and approval.

(A) The applicant shall file with the Council a final report not later than 60 days after completion of construction or of each section of construction, landscaping and rehabilitation, and operational testing, which final report shall include the following information:

(i) identification of all significant changes in the D&M plan identified pursuant to these regulations;

(ii) certification by the facility owner and a professional engineer, whose selection is subject to Council approval, that the facility has been constructed in conformity with the specifications and requirements contained in the development and management plan as specified pursuant to this section;

(iii) dates waste shipments to the site will commence;

(iv) results of operational tests;

(v) the date full-time continuous operation will begin;

(vi) the actual construction cost of the facility, including but not necessarily limited to the costs of site acquisition; site preparation, including erosion control and other measures to mitigate construction impacts; facility construction; and landscaping and rehabilitation.

(B) Not later than 90 days of receipt of the final report or notice of full time operation of the facility or of each section if construction is to continue throughout the life of the facility, whichever is later, the Council shall review the facility and issue a final approval of completion of the D&M plan, or section thereof, or the Council shall make recommendations to the certificate holder indicating what actions or procedures are necessary to conform to the certificate and receive final approval of completion of the D&M plan or section thereof. A letter of completion of the D&M plan shall be issued when the Council determines that the facility was constructed and is being operated in accordance with the certificate.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-10. Enforcement by the council

Whenever the Council becomes aware of any unauthorized construction or modification of a hazardous waste facility subject to the requirements of Chapter 445 of the Connecticut General Statutes or determines that there has been noncompliance with any terms, limitations, or conditions of a certificate, the Council, pursuant to Section 22a-123 of the Connecticut General Statutes, will take appropriate enforcement action. Such action may include issuing a cease and desist order, suspending or revoking a certificate, or requesting the Attorney General to bring an enforcement proceeding in superior court.

(Effective March 7, 1989; amended September 7, 2012)

Sec. 22a-116-B-11.

Repealed, March 7, 1989.

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Hazardous Waste Minimum Distance Requirements

Sec. 22a-122-1. Minimum distance requirements

(a) **Minimum distances.** Unless the applicant makes the demonstration required by subsection (c), the minimum distances between active parts of the following specified types of facilities and other land uses shall not be less than the following:

(1) For land based facilities, including landfills, surface impoundments, land treatment facilities, injection wells, and waste piles, the minimum distance shall be 400 feet from all other land uses;

(2) For non-land based facilities, including incinerators, thermal, physical, chemical, and biological treatment facilities, recovery facilities, and storage facilities, the minimum distance shall be 150 feet from all other land uses.

(b) **Additional information.** The applicant shall identify in its application all existing and presently planned schools, hospitals, nursing homes, and occupied dwellings within 2000 feet of all active parts of the proposed facility. The applicant shall demonstrate that the health and safety of persons utilizing such structures will not be jeopardized by the siting of the facility. If the applicant fails to make the required showing or the council otherwise determines that the minimum distances set forth in subsection (a) are inadequate to protect the public health and safety, the council may require distances in excess of such minimum distances.

(c) **Maximum safety demonstration.** If the applicant affirmatively demonstrates to the council's satisfaction that a distance less than the minimum set forth in Subsection (a) will insure the maximum safety of the public from potential dangers associated with the siting of the facility, then the council may reduce the minimum required distance accordingly, provided, however, that in no event shall the required minimum distance be less than 200 feet from active parts of land based disposal facilities and 75 feet from active parts of non-land based facilities.

(d) **Considerations.** In determining whether to require or allow distances which differ from the minimum distances set forth in subsection (a), the council will consider, among other relevant facts and circumstances, the following factors:

(1) Whether a different distance will provide sufficient space, including an adequate margin of safety:

(A) to detect migration of hazardous wastes from the active part of the facility;

(B) to conduct remedial measures which will prevent escape of such hazardous waste from the facility (e.g., excavation of contaminated material, cut off walls, well points); and

(C) to adequately protect the public against the adverse effects of hazardous waste spills, fires, and explosions;

(2) Site specific hydrogeological conditions, such as the rate and direction of ground water flow, and soil permeability;

(3) Localized climatic conditions, such as prevailing wind direction and net precipitation;

(4) Population density in the vicinity of the facility;

(5) The degree of hazard of the wastes proposed to be handled, stored, disposed, treated, or recovered at the facility; and

(6) Specific design features and operation procedures incorporated into the facility proposal which eliminate or significantly reduce potential dangers to the public associated with the facility.

(e) **Minimum distance land ownership or restrictions.** The minimum distance required by the council pursuant to subsections (a) or (c) shall be maintained on

property of the owner of the hazardous waste facility. If the council, pursuant to subsection (b), determines that additional distances are required, it may, as a condition of the certificate, require the applicant to obtain legally enforceable restrictions on adjacent property which preclude the establishment of inconsistent land uses within the minimum distance determined to be necessary by the council. The minimum distances established by this section shall not apply to the facility's entrance and vehicular access route.

(Effective March 7, 1989)

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Superfund Priority Score

Sec. 22a-133f-1. Determination of the use of state funds and accounts for remedial action at hazardous waste disposal sites

(a) **Definitions**

''Hazardous Substance'' means any substance designated pursuant to Section 101 (14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601, et seq.); any hazardous waste as defined in Section 22a-448 of the Connecticut General Statutes, as amended; or any substance which, if it were no longer intended for beneficial use, would meet the definition of ''hazardous waste'' contained in Section 22a-448 of the Connecticut General Statutes, as amended.

''SPL'' means the State of Connecticut Superfund Priority List established by the Commissioner of Environmental Protection pursuant to subsection (b) of this section.

''SPS'' means the State of Connecticut Superfund Priority Score used by the Commissioner of Environmental Protection to determine the priority of sites on the SPL as calculated pursuant to subsection (e) of this section.

(b) **The Superfund Priority List**

(1) The Commissioner shall establish a list of hazardous waste disposal sites deemed eligible for expenditure of state funds for remedial actions pursuant to Sec. 22a-133f of the Connecticut General Statutes. This list shall be known as the SPL.

(2) The priority for funding of remedial action at sites on the SPL shall be determined by the Superfund Priority Score (SPS) calculated pursuant to subsection (e) of this section. Except as otherwise provided in subsection (c) of this section, priority for state funded remedial actions shall be given to the sites on the SPL with the highest SPS. Whenever two sites on the SPL have the same SPS, the Commissioner shall determine the order of priority for funding based on any factors he or she deems appropriate.

(3) The SPL shall be updated whenever a site is added to or dropped from the list and whenever a site is scored or rescored pursuant to subsection (e) of this section.

(4) Continued funding of the current phase of remedial action, and the funding of successive phases of remedial action at sites at which state funded remedial action has been initiated, may be continued, at the discretion of the Commissioner, regardless of any changes in circumstances related to the site, or the relative priority of sites on the SPL caused by the addition of sites to the SPL or the rescoring of sites on the SPL.

(5) State funded remedial action at hazardous waste disposal sites which was initiated prior to the adoption of this regulation shall continue to be funded from state funds and accounts after the adoption of these regulations regardless of the relative priority of such site(s) on the SPL except as otherwise provided in subsections (c) or (d) of this section.

(c) **Project phasing and project by-pass procedure**

(1) Project phasing

(A) Remedial Actions undertaken pursuant to Section 22a-133e of the Connecticut General Statutes and this regulation will be done on a phased basis:

Phase 1–Remedial Investigation/Feasibility Study (RI/FS)
Phase 2–Remedial Design (RD)
Phase 3–Site remediation (SR)
Phase 4–Post cleanup care, monitoring, and long-term mitigation

(B) Funding for a particular phase of remedial action at a specific site shall be committed when that phase is ready to proceed unless the Commissioner determines that funding of multiple phases, or funding of specific tasks within one of the phases, will result in more efficient use of remedial action funds and/or will better protect the environment and public health.

(C) At the Commissioner's discretion, a portion of the funds available for remedial actions each year may be committed to Remedial Investigation/Feasibility Study, and Remedial Design at sites chosen from the SPL to ensure that these sites will be ready for implementation of clean-up and mitigation measures as soon as funding is available consistent with their relative priority on the SPL.

(2) Project by-pass procedure

The Commissioner may by-pass a hazardous waste disposal site for remedial action and then undertake remedial action at a site with a lower priority for the following reasons:

(A) The Commissioner determines that the next phase of remedial action at a site is not ready to proceed within the time deemed reasonable by the Commissioner.

(B) Funding available at the time of the decision is insufficient to complete the next phase of remedial action at the site.

(3) A site that is by-passed shall retain its relative priority ranking for future funding.

(d) **Removal of sites from the Superfund Priority List**

(1) The Commissioner may, at any time, remove a site from the SPL if he or she determines that:

(A) The remedial actions as defined in Sec. 22a-133a of the Connecticut General Statutes have been completed; or

(B) The site no longer constitutes an unacceptable threat to the environment or public health.

(2) All sites removed from the SPL shall be eligible for funding should the Commissioner determine that new information or future conditions indicate the need for additional remedial action, and the site meets the requirements for funding specified in Sec. 22a-133f of the Connecticut General Statutes.

(e) **The Superfund Priority Score**

The Commissioner shall evaluate the factors listed in this subsection and assign a score for each hazardous waste disposal site deemed eligible for state funded remedial action under the provisions of Sec. 22a-133f of the Connecticut General Statutes. He or she shall then sum the scores of the factors to obtain a total score for the site. The totaled score shall be known as the Superfund Priority Score (SPS) for the site. The Commissioner may re-calculate the SPS at any time upon consideration of information which was not included in the original computation.

(1) Exposure Potential: Accessibility

Maximum score possible=12 pts.

Potential for people who are unauthorized to enter the site, or unaware of the presence of hazardous substances, to come into direct contact with a hazardous substance at the hazardous waste disposal site. The potential for direct contact will be scored as it exists at the time the site is placed on the SPL. The exposure potential may be rescored at the discretion of the Commissioner if he or she determines that such rescoring is warranted by changed conditions at the site and that such rescoring will not interfere with the goals of the program.

Hazardous substances are exposed on the ground surface, or in open or leaking containers, or in closed but unsecured containers; unless the site security mea-

sures specified in section 22a-449 (c)-22 of the Regulations of Connecticut State Agencies are in place 12
Site lacks security measures specified in section 22a-449 (c)-22 of the Regulations of Connecticut State Agencies, but all of the hazardous substances on the site are in closed containers which are locked, secured, fenced, marked, or stored in such manner as to make tampering by persons not familiar with the materials difficult 6
Security measures specified in section 22a-449 (c)-22 of the Regulations of Connecticut State Agencies are present; or the hazardous substance(s) are located entirely below ground; or direct contact with a hazardous substance is otherwise prevented 0

(2) Impact to ground water for the potentially affected area:

Maximum score possible = 30 pts.

For the purposes of this subsection, the ''potentially affected area'' will be that area within a three (3) mile radius of any hazardous substance at the site. The Commissioner may, at his or her discretion, remove from consideration any portion of such area which the Commissioner judges to be unlikely to be affected by a release to the subsurface from the site.

(A) Ground water classification goal established pursuant to section 22a-426 of the Connecticut General Statutes for the area potentially affected by the site. If more than one goal has been established for the area, the more stringent goal shall apply.

GAA 5
GA 4
GB 3
GC 2

(B) Potentially affected aquifer, regardless of the ground water quality classification goal established for the area. For the purposes of this subparagraph ''stratified-drift areas'' shall be those areas delineated as such on the map entitled: ''Ground-Water Yields for Selected Stratified-Drift Areas in Connecticut,'' United States Geological Survey in cooperation with the Natural Resources Center Department of Environmental Protection, dated 1986, by David L. Mazzaferro, Scale 1:125,000; and ''zones of contribution'' and ''recharge areas'' shall be those areas delineated pursuant to the provisions of Public Act 88-324, as amended.

The hazardous waste(s) or hazardous substance(s) are located within a stratified-drift area, or a zone of contribution 5
The potentially affected area extends into a stratifed-drift area, or the hazardous waste(s) or hazardous substance(s) are located within a recharge area. . 3
Not applicable 0

(C) Population served by public or private water supply wells drawing water from the potentially affected area:

More than 5000 people 10
1001 to 5000 people 8
101 to 1000 people 7
26 to 100 people 6
Less than 26 people 5
Not applicable 0

(D) Existing aquaculture, agriculture, industrial or commercial uses drawing water from the potentially affected area:

Agricultural or aquaculture application 5

Industrial, commercial, or uses other than drinking water supply 2
No known existing use 0

Note: If a score of 5 points or more has already been assigned pursuant to subparagraph (2) (C) of this subsection, a score of zero (0) shall be assigned for subparagraph (2) (D) of this subsection.

(E) Potential for release of a hazardous substance to the ground water:

Known release (hazardous substance known or reasonably suspected to have been released on, or to have emanated from, the site has been detected in the ground water) 10
Potential release (hazardous substance has been stored or handled such that a release to the soil and/or groundwater may have occurred and there are no known barriers which effectively prevent the migration of the hazardous substance to ground water) 5
No known potential for release (all hazardous substances at the site are, and have been, contained in such manner as to preclude their release to the environment) 0

(3) Impact to surface water for the potentially affected area:

Maximum score possible = 30 pts.

Impact to surface water for the potentially affected area: For the purposes of this paragraph, the ''potentially affected area'' will be that area within a distance of three (3) miles downstream of any hazardous substance at the site. Such distance shall be measured along the anticipated overland flow path to the watercourse or surface water body, thence downstream along the watercourse or surface water body. The Commissioner may, at his or her discretion, remove from consideration any portion of such area which the Commissioner judges to be unlikely to be affected by a release to the surface waters from the site.

(A) Surface water classification goal established pursuant to section 22a-426 of the Connecticut General Statutes for the area potentially affected by the site. If more than one goal has been established for the area, the more stringent goal shall apply,

AA or SA. 5
A 4
B or SB 3
C or SC 2
D or SD 1
Not Applicable 0

(B) Population served by potable public or private water supply which draws water from the potentially affected area:

More than 5000 people 10
1001 to 5000 people 8
101 to 1000 people 7
26 to 100 people 6
Less than 26 people 5
No known use 0

(C) Existing aquaculture, agriculture, industrial or commercial uses drawing water from the potentially affected area:

Agricultural or aquaculture applications 5
Industrial, commercial, or uses other than drinking water supply 2
No known existing use 0

Note: If a score of 5 or more has already been assigned pursuant to subparagraph (3) (B) of this subsection, a score of zero (0) will be assigned for subparagraph (3) (C) of this subsection.

(D) Existing recreational use:

Locations within the potentially affected area are utilized for swimming, boating, fishing, or other water contact recreation. 5

No known recreational use(s) within the potentially affected area 0

(E) Potential for release of a hazardous substance to surface water:

Known release (hazardous substance known or reasonably suspected to have been released on, or to have emanated from, the site has been detected in surface water). 10

Potential release (hazardous substance has been stored or handled such that a release to surface water may have occurred and there are no known barriers which effectively prevent the migration of the hazardous substance to surface water) 5

No known potential for release (all hazardous substances at the site are, and have been contained in such manner as to preclude their release to the environment) 0

(4) Toxicity, persistence, mobility, and quantity of hazardous substances the Commissioner has reason to believe are present at the site.

The Commissioner shall evaluate the hazardous substance(s) at the site for toxicity, persistence, and mobility. The substance with the highest combined score for these three characteristics shall be considered representative of the potential hazard posed by the site for subparagraphs (4) (A) (B) and (C) of this subdivision of the scoring system. The estimated waste quantity will be the sum of all hazardous wastes which may have been discharged or disposed at the site.

Maximum score possible = 15 pts.

(A) Toxicity

*SAX level 3 5

SAX level 2. 3

SAX level 1. 2

Not applicable 0

*Sax, N.I., ''Dangerous Properties of Industrial Materials,'' Van Nostrand Rheinhold Co., New York, New York, 6th edition, 1984, as revised and updated.

(B) Persistence

Metals, polycyclic compounds, and halogenated hydrocarbons 3

Substituted and other ring compounds. 2

Straight chain hydrocarbons 1

Easily biodegradable compounds 0

(C) Mobility

A hazardous substance which may change physical state (eg. frozen to liquid state) due to normal seasonal ranges of temperature shall be scored in accordance with its most mobile form within such seasonal temperature range.

Gas (substances which would essentially completely dissipate into the atmosphere if not physically controlled). 4

Liquid (including substances in liquid form and substances dissolved in a liquid carrier or solvent). 3

Slurry or sludge (substances suspended or mixed into a liquid carrier such that the suspension or mixture has the physical properties of a liquid). . . . 2

Solid (substances not meeting the criteria specified above) 1

(D) Estimated quantity of hazardous substances that may have been discharged or disposed of at the site:

Included in the quantity shall be all hazardous wastes and hazardous substances which may have been disposed at the site; any solid wastes with which such hazardous substances or wastes may have been mixed; any contaminated soil materials brought to the site from another location off the site; and any soil materials on site which have been mechanically mixed with the hazardous substance(s) or waste(s). In general, soil materials, solid waste, groundwater, and surface water contaminated by hazardous substance(s) or waste(s) due solely to the migration of such contaminants under the influence of natural forces such as gravity or infiltrated precipitation will not be included in the calculation of the quantity of waste.

Greater than 63 tons or cubic yards; or greater than 251 drums; or greater than 12,550 gallons 3

11 to 63 tons or cubic yards; or 41 to 251 drums; or 2,050 gallons to 12,550 gallons or unknown quantity of hazardous waste disposed within the past ten years 2

Less than 11 tons or cubic yards; or less than 41 drums; or less than 2,050 gallons; or unknown quantity of hazardous waste disposed more than ten years ago 1

(5) Impact to the environment:

Maximum score possible = 12 pts.

(A) Potential for wildlife or domesticated animals to come into direct contact with hazardous substances at or emanating from the site.

Hazardous substances are exposed on the ground surface; or are in open or leaking containers; or are below ground and there is evidence of burrowing in the area of the hazardous substance(s). 3

Hazardous substances are stored in closed containers which cannot be opened by animals or gnawed through. 2

Hazardous substances are entirely below ground and undisturbed by borrowing or are stored in a building or structure secured against animal entry . . 0

(B) Potentially affected Connecticut Species of Special Concern within a one (1) mile radius measured from any hazardous substances at the site, not from the facility or property boundary.

Connecticut Species of Special Concern are those species of plants and animals designated by the Department of Environmental Protection as rare species, including species which occur in very small numbers or populations, or both, relative to other related taxa in Connecticut, and thus are seldom observed in broad-scale surveys in the state.

Rare Species (Group I). 4

Infrequent or Declining Species (Group II) 3

Range or habitat limited species (Group III) 2

Not applicable 0

(C) Potentially affected inland or coastal wetlands as defined in Sections 22a-29 and 22a-38 of the Connecticut General Statutes, as amended, measured from the hazardous substance, not from the facility or property boundary.

Minimum 5 acre wetland within 1/2 mile. 3

< 5 acre wetland within 1/2 mile 2

No wetland area within 1/2 mile. 0

(D) Hazardous substance(s) at the site are located within a flood boundary, either wholly or partially, as designated on maps published by the National Flood Insurance Program.

Within a 100 year flood boundary; or no flood boundary mapped, but repetitive flooding is known to occur. 2

Within a 500 year flood boundary; or repetitive flooding is not known to have occurred 1

Not located in a flood boundary; or no flooding has been known to occur 0

(6) Other factors:

Maximum score possible = 6 pts.

(A) Fire hazard at the hazardous waste disposal site:

The Commissioner shall evaluate the hazardous substance(s) at the site to determine potential fire hazards. The substance that has the highest score shall be considered representative of the potential fire hazard due to ignitability for the purposes of this scoring system.

Known fire hazard (hazardous substance meets the characteristics of ignitability pursuant to 40 CFR 261.21) 2

No known fire hazard (hazardous substance does not meet the characteristics of ignitability pursuant to 40 CFR 261.21) 0

(B) Potential for release of a hazardous substance to the atmosphere at the site:

Known release (hazardous substance detected in the atmosphere at the site) 2

Potential release (hazardous substance can reasonably be expected to migrate to the atmosphere at the site) 1

No known potential for release 0

(C) Hazard Ranking Score. The final Hazard Ranking Score as described in 40 CFR 300 Appendix A shall be considered. If a final HRS score has not been calculated, the preliminary score shall be considered.

HRS score 28.5 or greater 2

HRS score 10 to 28.4. 1

HRS score less than 10 or not applicable 0

(Effective August 25, 1989)

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Remediation Standard

Sec. 22a-133k-1. Definitions

(a) **Definitions.**

For the purposes of sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies, the following definitions apply:

(1) ''Analytical detection limit'' means the minimum concentration of a substance that can be quantified consistently and reliably using methods approved by EPA and which concentration shall be (A) for a substance in ground water, equal to or less than the ground-water protection criterion for such substance determined (i) for a sample of ground water in a GA area using analytical methods specified in subpart C of 40 CFR part 141 or (ii) for a sample of ground water in a GB area using methods established pursuant to ''Test Methods for Evaluating Solid Waste: Physical/Chemical Methods'', SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C. 20460; or (B) for a substance in soil, equal to or less than the residential direct exposure criteria or the applicable pollutant mobility criteria, whichever is lower using methods established pursuant to ''Test Methods for Evaluating Solid Waste: Physical/Chemical Methods'', SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C. 20460.

(2) ''Aquifer protection area'' means an aquifer protection area as defined in section 22a-354h of the General Statutes.

(3) ''Area of influence'' means as ''area of influence'' as defined in section 22a-354b-1(a) of the Regulations of Connecticut State Agencies.

(4) ''Areal extent of a ground-water plume'' means the surface area beneath which ground water has been or may be polluted by a release and in which ground water one or more substances from such release is or may be present at a concentration above the analytical detection limit.

(5) ''Background concentration for ground water'' with respect to a particular release means the concentration of a substance in ground water (A) at the nearest location upgradient of and unaffected by the release; or (B) if such release occurred at or created a ground-water divide, at the nearest location representative of ground water quality unaffected by any release.

(6) ''Background concentration for soil'' means the representative concentration of a substance in soil of similar texture and composition outside the subject release area and in the general geographic vicinity of such release area, but not within any other release area.

(7) ''Carcinogenic substance'' means a substance defined as a ''carcinogen'' by federal or state agencies and for which a quantitative health risk extrapolation is available.

(8) ''CFR'' means the Code of Federal Regulations.

(9) ''Commissioner'' means the Commissioner of Environmental Protection or his designee.

(10) ''Dense non-aqueous phase liquid'' means a non-aqueous phase liquid that has a density greater than water at 20 degrees Celsius.

(11) ''Direct Exposure Criteria'' means the concentrations identified in Appendix A to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies or any alternative direct exposure criteria approved by the Commissioner pursuant to section 22a-133k-2(d) of the Regulations of Connecticut State Agencies.

(12) ''Downgradient'' means in the direction of the maximum rate of decrease of hydraulic head.

(13) ''Downgradient area'' with respect to a release of a substance means the area bounded by (A) the width of the release area of such substance perpendicular to the direction of ground-water flow, (B) two side boundary lines parallel to the downgradient direction of ground water flow extending from the two endpoints of said width to the downgradient parcel boundary, and (C) the downgradient parcel boundary extending between the two side boundary lines; excluding any portion of such downgradient area that is (i) affected by any other release of such substance or (ii) beneath an existing permanent structure.

(14) ''Environmental land use restriction'' means an environmental land use restriction as defined in section 22a-133q-1 of the Regulations of Connecticut State Agencies.

(15) ''Environmentally isolated soil'' means polluted soil which is: (A) (i) beneath an existing building or (ii) beneath another existing and permanent structure which the Commissioner has determined in writing would prevent the migration of pollutants; (B) not a continuing source of pollution; (C) not polluted with volatile organic substances or, if it is polluted with such substances, the concentration of such substances has been reduced in concentration to the maximum extent prudent; and (D) above the seasonal high water table.

(16) ''EPA'' means the United States Environmental Protection Agency.

(17) ''Excess lifetime cancer risk'' means the estimated probability that an individual's exposure to a substance could result in cancer.

(18) ''GA area'' means an area where the ground-water classification is GA or GAA, respectively.

(19) ''GB area'' means an area where the ground-water classification is GB.

(20) ''Ground water'' means that portion of waters as defined in section 22a-423 of the General Statutes which portion is at or below the water table.

(21) ''Ground-water classification'' means the ground-water classification goal or the ground-water classification, whichever is more stringent, established in the Water Quality Standards.

(22) ''Ground-water divide'' means a line on the water table from which the water table slopes downward in both directions away from such line.

(23) ''Ground-water protection criteria'' means the concentrations identified in Appendix C to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(24) ''Ground-water plume'' means ground water which has been polluted by a release and in which ground water one or more substances from such release is present at a concentration above the analytical detection limit.

(25) ''Hazard index'' means the calculation of the potential for non-cancer health effects as a result of exposure to one or more substances with the same or similar modes of toxic action or toxic endpoints.

(26) ''Hydraulic gradient'' means the change in hydraulic head per unit distance.

(27) ''Hydraulic head'' means the elevation to which water rises in a piezometer or a well.

(28) ''Inaccessible soil'' means polluted soil which is: (A) more than four feet below the ground surface; (B) more than two feet below a paved surface comprised of a minimum of three inches of bituminous concrete or concrete, which two feet may include the depth of any material used as sub-base for the pavement; or (C) (i) beneath an existing building or (ii) beneath another existing permanent structure provided written notice that such structure will be used to prevent human contact with such soil has been provided to the Commissioner.

(29) ''Industrial or commercial activity'' means any activity related to the commercial production, distribution, manufacture or sale of goods or services, or any other activity which is not a residential activity as defined in subdivision (53) of this subsection.

(30) ''Industrial/commercial direct exposure criteria'' means the concentrations identified as industrial/commercial direct exposure criteria in Appendix A to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(31) ''Industrial/commercial volatilization criteria'' means the concentrations identified as industrial/commercial volatilization criteria in Appendices E and F to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(32) ''Intermittent watercourse'' means ''intermittent watercourse'' as defined in section 22a-38 of the General Statutes.

(33) ''Light non-aqueous phase liquid'' means a non-aqueous phase liquid that has a density equal to or less than water at 20 degrees Celsius.

(34) ''Matrix interference effect'' means the inability to measure the concentration of a substance in a sample at the analytical detection limit due to chemical interferences within the sample which interferences cannot be compensated for using methods approved by EPA.

(35) ''Natural attenuation'' means a decrease in concentration of a substance in ground water through operation of natural physical or chemical processes, including but not limited to adsorption, absorption, dilution, phase transfer, oxidation, organic complexation, biodegradation, dispersion and diffusion.

(36) ''Non-aqueous phase liquid'' means a liquid that is not dissolved in water.

(37) ''Organoleptic'' means the capability to produce a detectable sensory stimulus such as odor or taste.

(38) ''Parcel'' means a piece, tract or lot of land, together with the buildings and other improvements situated thereon, a legal description of which piece, parcel, tract or lot is contained in a deed or other instrument of conveyance.

(39) ''PCB'' means polychlorinated biphenyls.

(40) ''PPB'' means parts per billion.

(41) ''PPM'' means parts per million.

(42) ''Person'' means person as defined in section 22a-2(c) of the General Statutes.

(43) ''Pollutant mobility criteria'' means the concentrations identified in Appendix B to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies or any alternative pollutant mobility criteria approved by the Commissioner pursuant to subsection 22a-133k-2(d) of the Regulations of Connecticut State Agencies.

(44) ''Polluted fill'' means soil or sediment which contained polluting substances at the time such soil or sediment was deposited as fill material.

(45) ''Polluted soil'' means soil affected by a release of a substance at a concentration above the analytical detection limit for such substance.

(46) ''Pollution'' means pollution as defined in section 22a-423 of the General Statutes.

(47) ''Potable water'' means potable water as defined in section 22a-423 of the General Statutes.

(48) ''Potential public water supply resource'' means (A) any ''potential well field'' as defined in section 22a-354a of the General Statutes, or (B) any area identified by the Commissioner pursuant to section 22a-354c(b) of the General Statutes.

(49) ''Prudent'' means reasonable, after taking into consideration cost, in light of the social and environmental benefits.

(50) ''Release'' means any discharge, spillage, uncontrolled loss, seepage, filtration, leakage, injection, escape, dumping, pumping, pouring, emitting, emptying, or disposal of a substance.

(51) ''Release area'' means the land area at and beneath which polluted soil is located as a result of a release.

(52) ''Remediation'' means the containment, removal, mitigation, or abatement of pollution, a potential source of pollution, or a substance which poses a risk to human health or the environment, and includes but is not limited to the reduction of pollution by natural attenuation.

(53) ''Residential activity'' means any activity related to a (A) residence or dwelling, including but not limited to a house, apartment, or condominium, or (B) school, hospital, day care center, playground, or outdoor recreational area.

(54) ''Residential direct exposure criteria'' means the concentrations identified as residential direct exposure criteria in Appendix A to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(55) ''Residential volatilization criteria'' means the concentrations identified as residential volatilization criteria in Appendices E and F to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(56) ''Seasonal high water table'' means, on an annual basis, the highest plane in the ground at which plane all pore spaces are filled with water atmospheric pressure.

(57) ''Seasonal low water table'' means, on an annual basis, the lowest plane in the ground at which plane all pore spaces are filled with water atmospheric pressure.

(58) ''Sediment'' means unconsolidated material occurring in a stream channel, estuarine waters, or marine waters.

(59) ''Seven day, ten year low flow'' or ''7Q10'' means the lowest seven consecutive day mean stream discharge rate with a recurrence interval of ten (10) years.

(60) ''Soil'' means unconsolidated geologic material overlying bedrock, but not including sediment.

(61) ''Soil water'' means that portion of waters as defined in section 22a-423 of the General Statutes which portion is above the water table.

(62) ''SPLP'' means Synthetic Precipitation Leaching Procedure EPA Method 1312 as set forth in ''Test Methods for Evaluating Solid Waste: Physical/Chemical Methods'', SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C. 20460.

(63) ''Substance'' means an element, compound or material which, when added to air, water, soil or sediment, may alter the physical, chemical, biological or other characteristic of such air, water, soil or sediment.

(64) ''Surface-water protection criteria'' means the concentrations identified in Appendix D to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies or any alternative surface-water protection criteria calculated or approved by the Commissioner in accordance with subdivision 22a-133k-3(b) (3) of the Regulations of Connecticut State Agencies.

(65) ''TCLP'' means Toxicity Characteristic Leaching Procedure EPA Method 1311 as set forth in ''Test Methods for Evaluating Solid Waste: Physical/Chemical Methods'', SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C. 20460.

(66) ''Technically practicable'' means, with respect to remediation, the greatest degree of remediation that can be achieved using sound engineering and hydrogeologic practices.

(67) ''Upgradient'' means in the direction of maximum rate of increase of hydraulic head.

(68) ''Upgradient area'' with respect to a release area of a substance means the area bounded by (A) the width of the release area of such substance perpendicular to the direction of ground-water flow, (B) two side boundary lines parallel to the upgradient direction of ground-water flow extending from the two endpoints of said width to the upgradient parcel boundary, and (C) the upgradient parcel boundary extending between the two side boundary lines; excluding any portion of such upgradient area that is (i) affected by any other release of such substance or (ii) beneath an existing permanent structure.

(69) ''Volatilization criteria'' means the concentrations identified in Appendix E and Appendix F to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies or alternative criteria approved by the Commissioner pursuant to subdivision 22a-133k-3(c) (4) of the Regulations of Connecticut State Agencies.

(70) ''Volatilization criteria for ground water'' means the concentrations identified in Appendix E to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(71) ''Volatilization criteria for soil vapor'' means the concentrations identified in Appendix F to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(72) ''Water table'' means the plane in the ground at which plane all pore spaces are filled with water at atmospheric pressure.

(73) ''Water Quality Standards'' means the latest adopted Connecticut Water Quality Standards and Criteria adopted by the Commissioner pursuant to section 22a-426 of the General Statutes.

(74) ''Wetland'' means wetlands as defined in sections 22a-38(15) and section 22a-29(2) of the General Statutes.

(75) ''Zone of influence'' means zone of influence as defined in section 22a-430-3(a) of the Regulations of Connecticut State Agencies.

(b) **Applicability.**

Sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies apply to any action taken to remediate polluted soil, surface water or a ground-water plume at or emanating from a release area which action is:

(1) required pursuant to Chapter 445 or 446k of the General Statutes, or

(2) taken pursuant to Public Act 95-183 or Public Act 95-190 including but not limited to any such action required to be taken or verified by a licensed environmental professional pursuant to such Public Acts.

Sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies do not apply within the zone of influence of a ground-water discharge permitted by the Commissioner under section 22a-430 of the General Statutes. Any person conducting a remediation in accordance with said sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies shall obtain all permits and other authorizations required by state, federal and local law and shall comply with all applicable state, federal and local laws, including without limitation the requirements of 40 CFR Part 761. In the event that any provision of sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies conflicts with any provision of any other statute or regulation, the more stringent provision shall prevail. Nothing in this subsection shall be construed as requiring any further remediation of any release

which has been remediated and which remediation has been approved in writing by the Commissioner, unless the Commissioner takes action to require such remediation pursuant to any section of Chapter 446k of the General Statutes.

(c) **Time frames for Issuance of Approvals by the Commissioner.**

The Commissioner shall, no later than thirty days after the date of receipt of a request for his approval of any variance from or alternative criteria pursuant to sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, provide to the requester in writing estimated time frames for the Commissioner to (1) determine whether additional information is needed for him to evaluate the request; and (2) approve or deny a complete request. In addition, no later than one hundred and eighty days following adoption of said sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner shall make available general estimated written time frames for the Commissioner to approve any variance or alternative criterion pursuant to these regulations, including estimated time frames for the Commissioner to (1) determine whether additional information is needed to evaluate the request; and (2) approve or deny a complete request. In establishing estimated time frames pursuant to this subsection, the Commissioner shall take into account the complexity of the request, and the environmental and economic significance of the remediation, and shall expedite any request associated with any voluntary remediation pursuant to Public Acts 95-183 or 95-190.

(d) **Public Participation.**

(1) Public Hearing on Remediation. If the Commissioner determines that there is substantial public interest in any remediation proposed pursuant to section 2 of P.A. 95-190 or section 2 or 3 of P.A. 95-183, he may hold a public hearing on such proposed remediation, and he shall hold a hearing upon receipt of a petition signed by twenty-five or more persons. Notice of any such hearing shall be published in a newspaper of substantial circulation in the area of the proposed remediation at least thirty days prior to such hearing. Such hearing need not be conducted pursuant to the provisions of Chapter 54 of the General Statutes.

(2) Comment Procedures. Any public notice published or mailed pursuant to section 2 of P.A. 95-190 or section 2 or 3 of P.A. 95-183 shall provide that comments on the proposed remediation may be submitted to the Commissioner within forty-five days of the publication or mailing of such notice. The Commissioner shall forward a copy of all comments received by the date specified in the public notice and all comments made at a public hearing to the owner of the subject parcel and, if different, the person undertaking remediation at such parcel. The person undertaking remediation at the subject parcel shall, within sixty days of receiving such comments, submit to the Commissioner a written summary of all such comments and a written response to each such comment. The Commissioner shall review such summary and responses and shall adopt it as his own, adopt it with modifications, or reject it and prepare a response to each such comment. The Commissioner shall send a copy of the initial summary and responses and of his action with respect thereto to each person who submitted comments on the remediation proposal.

(e) **Periodic review.**

The Commissioner shall periodically review sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies to determine whether the implementation of such regulations is successfully protecting public health and the environment from the hazards of pollution. The Commissioner shall also evaluate whether the implementation of the regulations streamlines the process

of conducting remediation projects in Connecticut, based upon, among other things, his review of the number of remediation projects completed in accordance with said sections 22a-133k-1 through 22a-133k- 3, inclusive, of the Regulations of Connecticut State Agencies, the number of such projects reviewed by the Commissioner pursuant to sections 2 or 3 of P.A. 95-183, the length of time required for the Commissioner's review of complete requests for approval of alternative criteria or variances, and the number of remediation projects conducted pursuant to P.A. 95-190 or sections 2 or 3 of P.A. 95-183 which projects were verified by a licensed environmental professional. Such reviews shall be conducted at intervals of no more than five years, provided that nothing in this subsection shall preclude the Commissioner, at his discretion, from conducting such a review at any time and further provided that the first such review shall be conducted no later than eighteen months after the effective date of sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies. As a result of such a periodic review, the Commissioner may conclude that the goals of this subsection and section 22a-133k of the General Statute are being met, or he may conclude that revisions to such regulations are necessary to ensure that the implementation of said sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies achieves such goals, in which case he may revise such Regulations as he deems necessary to achieve those goals.

(Effective January 30, 1996)

Sec. 22a-133k-2. Standards for soil remediation

(a) **General.**

Unless otherwise specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, polluted soil at a release area shall be remediated to a concentration which meets (1) (A) the direct exposure criteria set forth in subsection (b) of this section or alternative direct exposure criteria established in accordance with subdivision (2) or subdivision (7) of subsection (d) of this section; and (B) the pollutant mobility criteria set forth in subsection (c) of this section or alternative pollutant mobility criteria established in accordance with subdivision (3) or (5) of subsection (d) of this section; or (2) the background concentration for soil provided notice has been submitted to the Commissioner which notice shall be submitted on a form furnished by the Commissioner and shall include a brief description of the subject release area and of the general characteristics of soils in the vicinity of such release area; a map showing the location of such release area, and based on reasonable inquiry of other release areas in the vicinity thereof, and of all soil samples taken for the purpose of characterizing background concentration for soil; and the results of all laboratory analyses of such samples.

(b) **Direct Exposure Criteria.**

(1) Except as otherwise provided in this paragraph, polluted soil at a release area shall be remediated to at least that concentration at which the residential direct exposure criteria for each substance is met.

(2) (A) Polluted soil at a release area may be remediated to a concentration at which the industrial/commercial direct exposure criteria for each substance except PCB is met if (i) access to the parcel containing such release area is limited to individuals working at or people temporarily visiting the subject parcel; and (ii) an environmental land use restriction is in effect with respect to such parcel, or to the portion of such parcel containing such release area, which environmental land use restriction ensures that the parcel or restricted portion thereof is not used for any

residential activity in the future and that any future use of such parcel or restricted portion thereof is limited to an industrial or commercial activity.

(B) Soil polluted with PCB at a release area may be remediated to a concentration at which the industrial/commercial direct exposure criteria for PCB is met if the parcel upon which such release area is located is (i) an outdoor electrical substation as defined in 40 CFR 761.123; or (ii) an other restricted access location as defined in said section 40 CFR 761.123 and an environmental land use restriction is in effect with respect to such parcel, or to the portion of such parcel containing such release area, which environmental land use restriction ensures that the parcel or restricted portion thereof is not used for any residential activity in the future and that any future use of such parcel or restricted portion thereof is limited to an industrial or commercial activity.

(3) The direct exposure criteria for substances other than PCB do not apply to inaccessible soil at a release area provided that if such inaccessible soil is less than 15 feet below the ground surface an environmental land use restriction is in effect with respect to the subject parcel or to the portion of such parcel containing such release area, which environmental land use restriction ensures that such soils will not be exposed as a result of excavation, demolition or other activities and that any pavement which is necessary to render such soil inaccessible is maintained in good condition unless and until such restriction is released in accordance with said section 22a-133q-1. Unless an alternative criterion has been approved in accordance with subsection 22a-133k-2(d) (7), inaccessible soil polluted with PCB may be remediated to a concentration of 10 ppm PCB by weight provided that (A) if such inaccessible soil is located on a parcel which is an other restricted access location as defined in said section 40 CFR 761.123, such soil may be remediated to a concentration of 25 ppm PCB by weight, or (B) if such inaccessible soil is located on a parcel which is an outdoor electrical substation as defined in 40 CFR 761.123, such soil may be remediated to a concentration of 25 ppm PCB by weight, or if a label or notice is visibly placed in the area in accordance with 40 CFR Part 761, to a concentration of 50 ppm PCB by weight.

(4) Additional Polluting Substances

(A) With respect to a substance at a release area for which a direct exposure criterion is not specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner may, after consultation with the Commissioner of Public Health, approve in writing a direct exposure criterion to apply to such substance at a particular release area. Any person requesting approval of a direct exposure criterion for such substance shall submit to the commissioner (i) a proposed risk-based direct exposure concentration for such substance calculated in accordance with subparagraph (B) or (C) of this subdivision as applicable, and (ii) the analytical detection limit for such substance. Before approving a direct exposure criterion the Commissioner shall consider the proposed risk-based direct exposure concentration for such substance, the analytical detection limit for such substance, any information about the health effects such substance may cause due to exposure pathways not accounted for in the proposed risk-based direct exposure, and any other information that the Commissioner reasonably deems necessary.

(B) The proposed residential risk-based direct exposure concentration shall be calculated using the following equations:

(i) For carcinogenic substances:

$$DEC_{RB} = \left[\frac{Risk}{CSF} \right] x \left[\frac{BW_C \text{ x } AT}{IR_C \text{ x } ED_C \text{ x } EF \text{ x } CF} + \frac{BW_A \text{ x } AT}{IR_A \text{ x } ED_A \text{ x } EF \text{ x } CF} \right]$$

(ii) For non-carcinogenic substances:

$$DEC_{RB} = \left[RFD \text{ x } HI \right] x \left[\frac{BW_C \text{ x } AT_C}{IR_C \text{ x } ED_C \text{ x } EF \text{ x } CF} + \frac{BW_A \text{ x } AT}{IR_A \text{ x } ED_A \text{ x } EF \text{ x } CF} \right]$$

(iii) The abbreviations used in subparagraphs (i) and (ii) shall be interpreted in accordance with the following table and shall be assigned the values specified therein:

Term	Description	Units	Value
DEC_{RB}	Risk-based Direct Exposure Criterion	mg/kg	calculated
Risk	Target Cancer Risk Level	unitless	1.0E-06
HI	Hazard Index	unitless	1.0
CSF	Cancer slope Factor	$(mg/kg\text{-}day)^{-1}$	substance-specific
RFD	Reference Dose	mg/kg-day	substance-specific
IR_C	Ingestion Rate, Child	mg/day	200
IR_A	Ingestion Rate, Adult	mg/day	100
EF	Exposure Frequency	days/year	365
ED_C	Exposure Duration, Child	years	6
ED_A	Exposure Duration, Adult	years	24
CF	Conversion Factor	kg/mg	0.000001
BW_C	Body Weight, Child	kg	15
BW_A	Body Weight, Adult	kg	70
AT	Averaging Time, for carcinogens	days	25550
AT_C	Averaging Time, Child for non-carcinogens	days	2190
AT_A	Averaging Time, Adult for non-carcinogens	days	8760

(C) The proposed industrial/commercial risk-based direct exposure concentration shall be calculated using the following equations:

(i) For carcinogenic substances:

$$DEC_{RB} = \left[\frac{Risk}{CSF} \right] x \left[\frac{BW \text{ x } AT}{IR \text{ x } ED \text{ x } EF \text{ x } CF} \right]$$

(ii) For non-carcinogenic substances:

$$DEC_{RB} = \left[RFD \times HI \right] \times \left[\frac{BW \times AT}{IR \times EF \times ED \times CF} \right]$$

(iii) The abbreviations used in subparagraphs (i) and (ii) shall be interpreted in accordance with the following table and shall be assigned the values specified therein:

Term	Description	Units	Value
DEC_{RB}	Risk-based Direct Exposure Criterion	mg/kg	calculated
Risk	Target Cancer Risk Level	unitless	1.0E-06
HI	Hazard Index	unitless	1.0
CSF	Cancer slope Factor	$(mg/kg\text{-}day)^{-1}$	substance-specific
RFD	Reference Dose	mg/kg-day	substance-specific
IR	Ingestion Rate	mg/day	50
EF	Exposure Frequency	days/year	250
ED	Exposure Duration	years	25
CF	Conversion Factor	kg/mg	0.000001
BW	Body Weight	kg	70
AT	Averaging Time, for carcinogens	days	25550
AT_A	Averaging Time, Adult for non-carcinogens	days	9125

(c) **Pollutant Mobility Criteria.**

(1) General.

(A) A substance, other than an inorganic substance or PCB, in soil above the seasonal low water table, or above the seasonal high water table if (i) remediation to the seasonal low water table is not technically practicable or would not result in the permanent elimination of a source of pollution or (ii) the subject soil is located in a GB area, shall be remediated to at least that concentration at which the results of a mass analysis of such soil for such substance does not exceed the pollutant mobility criterion applicable to the ground-water classification of the area at which such soil is located, except that in the circumstances identified in subdivision (2) of this subsection, remediation to achieve compliance with the pollutant mobility criteria may be conducted in accordance with the requirements established in said subdivision (2).

(B) An inorganic substance or PCB in soil above the seasonal low water table, or above the seasonal high water table if (i) remediation to the seasonal low water table is not technically practicable or would not result in the permanent elimination of a source of pollution or (ii) the subject soil is located in a GB area, shall be

remediated to at least that concentration at which the results of a TCLP or SPLP analysis of such soil for such substance does not exceed the pollutant mobility criterion applicable to the ground-water classification of the area at which such soil is located, except that in the circumstances identified in subdivision (2) of this subsection, remediation to achieve compliance with the pollutant mobility criteria may be conducted in accordance with the requirements established in said subdivision (2).

(2) Specific Circumstances

(A) Polluted Soils in a GA Area.

A soil in a GA area and polluted with a substance, other than 1,2 dichlorobenzene, ethyl benzene, toluene, xylenes or total petroleum hydrocarbons, which soil is at or above the seasonal low water table, or at or above the seasonal high water table if remediation to the seasonal low water table is not technically practicable or would not result in the permanent elimination of a source of pollution, may be remediated to at least that concentration at which the results of a TCLP or SPLP analysis of such soil for such substance do not exceed the ground-water protection criterion for such substance.

(B) Soils Polluted with Volatile Organic Substances in a GA area.

A soil in a GA area polluted with a volatile organic substance, other than 1,2 dichlorobenzene, ethyl benzene, toluene, or xylenes which soil is at or above the seasonal low water table, or at or above the seasonal high water table if remediation to the seasonal low water table is not technically practicable or would not result in the permanent elimination of a source of pollution, may be remediated to at least that concentration at which the results of a TCLP or SPLP analysis of such soil for such substance do not exceed the ground-water protection criterion for such substance multiplied by ten or the results of a mass analysis of such soil for such substance do not exceed the pollutant mobility criterion for such substance multiplied by ten or by an alternative dilution or dilution and attenuation factor approved by the Commissioner in accordance with subdivision (4) of subsection (d) of this section, provided no non-aqueous phase liquids are present in the subject release area as determined in accordance with subdivision (3) of this subsection, the water table is at least fifteen feet above the surface of the bedrock and the downward vertical flow velocity is not greater than the horizontal flow velocity, and:

(i) (aa) a public water supply distribution system is available within 200 feet of the subject parcel, all adjacent parcels, and any parcel within the areal extent of the ground-water plume caused by the subject release area, (bb) the ground water within the areal extent of such ground-water plume is not used for drinking water, (cc) no public or private water supply wells exist within 500 feet of the subject release area, and (dd) the ground water affected by the subject release area is not a potential public water supply resource; or

(ii) (aa) the concentration of any volatile organic substance in a ground-water plume and within seventy-five feet of the nearest downgradient parcel boundary does not exceed the ground-water protection criterion, (bb) except for seasonal variation, the areal extent of volatile organic substances in the ground-water plume is not increasing over time and the concentration of any volatile organic substance in the ground-water plume is not increasing, except as a result of natural attenuation, at any point over time and (cc) notice of such condition is provided to the Commissioner on a form furnished by the Commissioner, which notice shall include: a brief description of the release area; a brief description of the distribution and concentration of volatile organic substances in soil and ground water; a map showing the location

of the release area, and based on reasonable inquiry all other volatile organic substance release areas in the vicinity of the subject release area, all ground-water and soil monitoring points, and the areal extent of the volatile organic substance ground-water plume; and the results of all laboratory analyses conducted to determine whether the requirements of this subparagraph have been met; or

(iii) (aa) the concentration of any volatile organic substance within such ground-water plume does not exceed the ground-water protection criterion for such substance at a location downgradient of the release area, on the subject parcel, and within 25 feet of such release area, and (bb) notice of such condition is provided to the Commissioner on a form furnished by the Commissioner, which notice shall include: a brief description of the release area; a brief description of the distribution and concentration of volatile organic substances in soil and ground water; a map showing the location of the release area, and based on reasonable inquiry all other volatile organic substance release areas in the vicinity of the subject release area, and all ground-water and soil monitoring points; and the results of all laboratory analyses conducted to determine whether the requirements of this subparagraph have been met.

(C) Inorganic, semi-volatile, PCB or pesticide contamination in a GA area.

A soil in a GA area and polluted with inorganic substances, semi-volatile substances, PCB or pesticides, which soil is at or above the seasonal low water table, or at or above the seasonal high water table if remediation to the seasonal low water table is not technically practicable or would not result in the permanent elimination of a source of pollution, may be remediated to a level at which (i) (aa) the results of a TCLP or SPLP analysis of such soil for such substance do not exceed the ground-water protection criterion for such substance multiplied by ten or by an alternative dilution or dilution and attenuation factor approved by the Commissioner in accordance with subdivision (4) of subsection (d) of this section or (bb) the results of a mass analysis of such soil for a substance do not exceed the pollutant mobility criterion for such substance multiplied by ten or by an alternative dilution or dilution and attenuation factor approved by the Commissioner in accordance with subdivision (4) of subsection (d) of this section; provided (ii) (aa) the release area and any portion thereof is located at least twenty-five feet from the nearest legal boundary of the parcel in the downgradient direction, (bb) no non-aqueous phase liquids are present in the release area as determined in accordance with subdivision (3) of this subsection, and (cc) the water table is at least fifteen feet above the surface of the bedrock.

(D) Polluted Soils in a GB area.

A substance other than total petroleum hydrocarbons in soil above the seasonal high water table in a GB area may be remediated to a level at which the results of a TCLP or SPLP analysis of such soil does not exceed the ground-water protection criterion for any such substance (i) (aa) multiplied by 10, (bb) multiplied by the ratio of the summation of the areas downgradient and upgradient of the release area to the release area, provided that such ratio does not exceed 500, or (cc) or multiplied by an alternative dilution or dilution and attenuation factor approved by the Commissioner in accordance with subdivision (5) of subsection (d) of this section; (ii) provided non-aqueous phase liquids are not present in such soil as determined in accordance with subdivision (3) of this subsection.

(E) Site specific dilution in a GB area.

(i) A substance, other than total petroleum hydrocarbons, in a soil at or above the seasonal high water table in a GB area where the background concentration for

ground water for such substance is less than the applicable ground-water protection criterion, may be remediated to a level at which the results of a mass analysis of such soil for a substance do not exceed the pollutant mobility criterion applicable to such substance in a GA area multiplied by a site-specific dilution factor calculated in accordance with clause (ii) of this subparagraph, or the results of a TCLP or SPLP analysis of such soil for a substance do not exceed the ground-water protection criterion for such substance multiplied by a site-specific dilution factor calculated in accordance with clause (ii) of this subparagraph, provided (aa) no non-aqueous phase liquids are present in such soil as determined in accordance with subdivision (3) of this subsection; (bb) notice has been submitted to the Commissioner in accordance with clause (iii) of this subparagraph; and (cc) the water table in the release area is at least fifteen feet above the surface of the bedrock and the downward ground water vertical flow velocity is not greater than the ground water horizontal flow velocity.

(ii) For the purpose of clause (i) of this subparagraph, the site-specific dilution factor shall be calculated using the following formula: $DF = (1 + (Kid/IL))(1-F_{adj})$, where:

DF =site-specific dilution factor

K = hydraulic conductivity, in feet per year, of the unconsolidated aquifer underlying the release area

i = horizontal hydraulic gradient in feet per feet

d = 15 feet

I = infiltration rate in feet per year as specified in subparagraph (iv) of this subparagraph

L = length in feet of the release area parallel to the direction of ground-water flow

F_{adj}=background concentration for ground water divided by the ground-water protection criterion for the subject substance, or, where the background concentration for ground water can not be quantified, ½ the minimum detection limit for the subject substance divided by the ground-water protection criterion for the subject substance.

(iii) A notice submitted pursuant to clause (i) of this subparagraph shall be submitted on a form prescribed and provided by the Commissioner and shall include: a brief description of the release area and the general characteristics of soils in the vicinity of the release area; a map showing the location of the release area, and based on reasonable inquiry other release areas in the vicinity containing the substance for which the site-specific dilution factor is calculated, and all monitoring points; if applicable, justification for use of a till infiltration rate other than 0.5 feet per year, and the results of all the laboratory analyses and field analyses used to determine the (aa) parameters of the equation in clause (ii) of this subparagraph and (bb) identification of geologic material for the purposes of choosing an infiltration rate in accordance with clause (iv) of this subparagraph.

(iv)

Geologic Material	Infiltration Rate (feet/year)
Stratified Drift	2.0
Till	0.5 - 1.0
Lacustrine Deposits	0.4

(3) Determining the Presence of Non-aqueous Phase Liquids in Soil. For the purpose of this subsection, the presence of non-aqueous phase liquids in soil shall be determined using the following equation: $C_{nap} = (S/2p_b)(K_d p_b + O_w + H'O_a)$, where:

C_{nap} =the concentration of an organic substance at which or above which such substance may be present in a non-aqueous phase

S =the effective solubility

p_b =dry soil bulk density

K_d =soil-water partition coefficient, which may be approximated by $K_{OC} \cdot f_{OC}$

K_{OC} =soil organic carbon-water partition coefficient

f_{OC} =fraction organic carbon of soil

O_w =water-filled soil porosity (L_{water}/L_{soil})

O_a =air-filled soil porosity (L_{air}/L_{soil})

H' =Henry's law constant (dimensionless)

H =Henry's law constant (atm-m^3/mol)

The terms defined above shall be assigned the following values:

Term	Units	Value
C_{NAP}	mg/kg	calculated
S	mg/L	chemical-specific
ρ_b	kg/L	1.5 or the lowest value measured at the subject release area
K_d	L/kg	calculated
K_{OC}	L/kg	chemical-specific
f_{OC}	g/g	0.006 or the lowest value measured at the subject release area
θ_w	L_{water}/L_{soil}	0.15
θ_a	L_{air}/L_{soil}	0.28
H'	unitless	H x 41 where 41 is a conversion factor
H	atm-m^3/mol	chemical-specific

(4) Exceptions.

(A) If at a release area (i) the ground-water classification is GB and (ii) the elevation of the water table is below the elevation of the top of bedrock, such release area shall be remediated to a concentration which meets the pollutant mobility criteria applicable to any location at which the ground-water classification is GA or GAA.

(B) The pollutant mobility criteria do not apply to environmentally isolated soil provided an environmental land use restriction is in effect with respect to the parcel, or portion thereof, containing such soil which environmental land use restriction ensures that such soil will not be exposed to infiltration of soil water due to, among other things, demolition of the building.

(C) The pollutant mobility criteria do not apply to polluted fill on a parcel if: (aa) such fill is polluted only with coal ash, wood ash, coal fragments, asphalt paving fragments, or any combination thereof; (bb) such fill is not polluted with any volatile organic substance; (cc) the concentration of each substance in any such fill is consistent with the requirements established in subsection (b) of this section; (dd) such substance is not affecting and will not affect the quality of an existing or potential public water supply resource or an existing private drinking water supply; (ee) a public water supply distribution system is available within 200 feet of such parcel and all parcels adjacent thereto; and (ff) the placement of the fill was not prohibited by law at the time of placement.

(5) Additional Polluting Substances.

With respect to a substance for which a pollutant mobility criterion is not specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner may approve a pollutant mobility criterion, a dilution or dilution and attenuation factor, and a method for determining compliance with such criterion to apply to such substance at a particular release area, provided he finds that such criterion will ensure that soil water at such release area does not exceed, in a GA area, the ground-water protection criterion, or in a GB area the ground-water protection criterion multiplied by a dilution factor of 10.

(d) **Alternative Soil Criteria.**

(1) Requests for Approval of Alternative Soil Criteria.

(A) Any person requesting that the Commissioner approve an alternative criterion applicable to a particular release area shall submit: the name and address of the owner of the parcel at which such release area is located; the address of such release area and a brief description of its location; a detailed description of such release area; and a map at a scale of not less than 1:1200 showing the location of all release areas on such parcel, the subject release area, and describing the concentration and distribution of all substances in the soil of the subject release area, including but not limited to the substance for which an alternative criterion is sought; a detailed written report describing the justification for the proposed alternative criterion; and any other information the Commissioner reasonably deems necessary to evaluate such request.

(B) Any person requesting that the Commissioner approve an alternative pollutant mobility criterion or an alternative dilution or dilution attenuation factor shall submit, in addition to the information required by subparagraph (A) of this subdivision, a detailed description of any other release area located on the same parcel as the subject release area and which other release area (i) is affected or potentially affected by the subject release area or (ii) is affecting or potentially may affect the subject release area;

(C) Any person requesting that the Commissioner approve an alternative direct exposure criterion shall submit, in addition to the information required by subparagraph (A) of this subdivision, a detailed description of any other release area located on the same parcel as the subject release area.

(2) Alternative Direct Exposure Criteria.

With respect to a substance except PCB for which a direct exposure criterion is specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations

of Connecticut State Agencies, the Commissioner may approve an alternative direct exposure criterion and an alternative method for determining compliance with such criterion provided it is demonstrated to the satisfaction of the Commissioner, after consultation with the Commissioner of Public Health that the application of such alternative criterion at the subject release area will protect human health and the environment from the risks associated with direct exposure to polluted soil by ensuring that (A) the concentration of each carcinogenic substance in such soil does not exceed a 1×10^{-6} excess lifetime cancer risk level and the concentration of each non-carcinogenic substance in such soil does not exceed a hazard index of 1; or (B) for a release area polluted with multiple substances, the cumulative excess lifetime cancer risk for all carcinogenic substances in such soil does not exceed $1 \times 10^{-5,}$ and the cumulative hazard index does not exceed 1 for non-carcinogenic substances in such soil with the same target organ. Any person requesting approval of an alternative direct exposure criterion shall submit to the Commissioner and the Commissioner of Public Health a risk assessment prepared in accordance with the most recent EPA Risk Assessment Guidance for Superfund or other risk assessment method approved by the Commissioner in consultation with the Commissioner of Public Health, and shall submit any additional information specified by the Commissioner or the Commissioner of Public Health.

(3) Alternative Pollutant Mobility Criteria for GA Areas.

With respect to a substance occurring at a release area located in a GA area, and for which substance a pollutant mobility criterion is specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner may approve an alternative pollutant mobility criterion and an alternative method for determining compliance with such criterion, provided it is demonstrated to the Commissioner's satisfaction that the application of such alternative criterion at the subject release area will ensure that soil water at such release area will not exceed the ground-water protection criterion for such substance.

(4) Alternative Dilution or Dilution Attenuation Factor for GA Areas.

With respect to a substance occurring at a release area located in a GA area, and for which substance a pollutant mobility criterion is specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner may approve an alternative dilution or dilution attenuation factor, provided that it is demonstrated to the Commissioner's satisfaction that application of such dilution factor will ensure that such release area will not degrade ground-water quality and thereby prevent the achievement of the applicable ground-water remediation standards.

(5) Alternative Pollutant Mobility Criteria for GB Areas.

With respect to a substance occurring at a release area located in a GB area, and for which substance a pollutant mobility criterion is specified in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner may approve an alternative pollutant mobility criterion and an alternative method for determining compliance with such criterion at such release area, provided it is demonstrated to the Commissioner's satisfaction that the application of such criterion will ensure that soil water at the release area, after dilution with ground water derived from infiltration on the parcel, will not exceed the ground-water protection criterion for such substance.

(6) Alternative Dilution or Dilution Attenuation Factor for GB Areas.

With respect to a substance occurring at a release area located in a GB area, and for which substance a pollutant mobility criterion is specified in sections 22a-133k-

1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner may approve an alternative dilution or dilution attenuation factor, provided that it is demonstrated to the Commissioner's satisfaction that application of such alternative dilution or dilution attenuation factor will ensure that the soil water at such release area will not cause the ground water at the nearest downgradient property boundary to exceed the ground-water protection criterion for such substance.

(7) Alternative Direct Exposure Criterion for PCB.

The Commissioner may approve an alternative direct exposure criterion for PCB including an alternative direct exposure criterion for an inaccessible soil polluted with PCB, and an alternative method for determing compliance with such criterion, provided it is demonstrated to the satisfaction of the Commissioner after consultation with the Commissioner of Public Health that the application of such alternative criterion at the subject release area will protect human health and the environment from the risks associated with direct exposure to soil polluted with PCB and is consistent with 40 CFR Part 761 and with the ''Guide on Remedial Actions at Superfund Sites with PCB Contamination'' (EPA Directive 9355.4-01, August 1990).

(e) **Applying the Direct Exposure and Pollutant Mobility Criteria**

(1) Unless an alternative method for determining compliance with a direct exposure criterion has been approved by the Commissioner in writing, compliance with a direct exposure criterion is achieved when (A) the ninety-five percent upper confidence level of the arithmetic mean of all sample results of laboratory analyses of soil from the subject release area is equal to or less than such criterion, provided that the results of no single sample exceeds two times the applicable direct exposure criterion or (B) the results of all laboratory analyses of samples from the subject release area are equal to or less than the applicable direct exposure criterion.

(2) Unless an alternative method for determining compliance with a pollutant mobility criterion for a particular substance has been approved by the Commissioner in writing, compliance with a pollutant mobility criterion for such substance is achieved when:

(A) (i) a representative sampling program consisting of not less than twenty samples of soil located above the water table has been used to characterize the distribution and concentration of such substance at the subject release area or remaining at the subject release area following remediation, (ii) the release area has not been remediated by means of excavation and removal of polluted soil, (iii) the ninety-five percent upper confidence level of the arithmetic mean of all the sample results of laboratory analyses of soil from the subject release area for such substance is equal to or less than the applicable pollutant mobility criterion or the results of all laboratory analyses of samples from the subject release area are equal to or less than the applicable direct exposure criterion, and (iv) no single sample result exceeds two times the applicable pollutant mobility criterion;

(B) (i) a representative sampling program consisting of less than twenty samples of soil located above the water table has been used to characterize the distribution and concentration of substances remaining at the subject release area following remediation, (ii) the release area has not been remediated by means of excavation and removal of polluted soil, and (iii) the results of all laboratory analysis of samples from the subject release area for such substances are equal to or less than such pollutant mobility criterion; or

(C) (i) the subject release area has been remediated by means of excavation and removal of polluted soil, (ii) a representative sampling program consisting of samples

of soil located above the water table has been used to characterize the distribution and concentration of substances remaining at the subject release area following excavation and removal, and (iii) the results of all laboratory analyses of samples from the subject release area for such substances are equal to or less than such pollutant mobility criterion.

(3) Matrix interference effects.

If any applicable criterion for a substance in soil is less than the concentration for such substance that can be consistently and accurately quantified in a specific sample due to matrix interference effects, the following actions shall be taken:

(A) (i) ''Test Methods for Evaluating Solid Waste : Physical/Chemical Methods,'' SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C. 20460 shall be consulted to determine if an analytical method sufficiently sensitive to achieve the applicable analytical detection limit was used to conduct the analysis of the subject substance. If there is available an alternative analytical method which is sufficient to achieve the required analytical detection limit, appropriate for the sample matrix, and has been approved by EPA or approved in writing by the Commissioner, the subject soil shall be re-analyzed for the subject substance using such alternative method.

(ii) If a sample has been analyzed by one or more analytical methods in accordance with subparagraph (A) (i) of this subdivision and the applicable analytical detection limit has not been achieved due to matrix interference effects, such method(s) shall be modified in order to compensate for such interferences, in accordance with analytical procedures specified by EPA within the scope of the analytical method.

(B) If, after re-analyzing the subject soil and attempting to compensate for matrix interference effects in accordance with to subparagraph (A) of this subdivision, any applicable criterion for a substance in soil is less than the concentration for such substance that can be consistently and accurately quantified in a specific sample due to matrix interference effects, compliance with such criterion shall be achieved when such soil has been remediated to the lowest concentration for such substance which can be consistently and accurately quantified without matrix interference effects.

(C) A detailed summary of all measures taken to overcome matrix interference effects and a determination of the lowest alternative quantification level applicable to the analysis of such substance shall be prepared and, if requested by the Commissioner in writing, shall be submitted to the Commissioner for his review and approval.

(f) **Variances.**

(1) Widespread Polluted Fill.

The Commissioner may grant a variance from any of the requirements of subsection (c) of this section upon the written request of the owner of the subject parcel if the Commissioner determines that (A) geographically extensive polluted fill is present at such parcel and at other parcels in the vicinity of the subject parcel; (B) such fill is not polluted with volatile organic substances; (C) such fill is not affecting and will not affect the quality of an existing or potential public water supply resource or an existing private drinking water supply; (D) the concentration of each substance in such fill is consistent with subsection (b) of this section; (E) the placement of such fill was not prohibited by law at the time of placement; and (F) the person requesting the variance did not place the fill on the subject parcel. In determining whether to grant or deny such a variance, the Commissioner may consider the relative cost of compliance with subsection (c) of this section, how extensive the polluted fill is, what relative proportion of such fill occurs on the subject parcel,

and whether the person requesting the variance is affiliated with any person responsible for such placement through any direct or indirect familial relationship or any contractual, corporate or financial relationship other than that by which such person's interest in such parcel is to be conveyed or financed.

(2) Engineered Control of Polluted Soils.

(A) Provided that an engineered control of polluted soils is implemented pursuant to subparagraphs (B) and (C) of this subsection, the requirements of subsections (a) through (e) of this section do not apply if:

(i) the Commissioner authorized the disposal of solid waste or polluted soil at the subject release area;

(ii) the soil at such release area is polluted with a substance for which remediation is not technically practicable;

(iii) the Commissioner, in consultation with the Commissioner of Public Health, has determined that the removal of such substance or substances from such release area would create an unacceptable risk to human health; or

(iv) the Commissioner has determined, after providing notice and an opportunity for a public hearing, that a proposal by the owner of the subject parcel to use an engineered control is acceptable because (aa) the cost of remediating the polluted soil at such release area is significantly greater than the cost of installing and maintaining an engineered control for such soil and conducting ground-water monitoring at such release area in accordance with subsection (g) of section 22a-133k-3, and (bb) that the significantly greater cost outweighs the risk to the environment and human health if the engineered control fails to prevent the mobilization of a substance in the soil or human exposure to such substance. The Commissioner may hold a public hearing pursuant to this section if in his discretion the public interest will be best served thereby, and he shall hold a hearing upon receipt of a petition signed by at least twenty-five persons. Notice of the subject proposal shall be provided by the owner of the subject parcel in two of the three following manners: (i) by publication in a newspaper of substantial circulation in the affected area; (ii) by placing and maintaining on the subject parcel, for at least thirty days, in a legible condition a sign which shall be not less than six feet by four feet which sign shall be clearly visible from the public highway; or (iii) by mailing notice to the owner of record of each property abutting the subject parcel at his address on the most recent grand tax list of the municipality or municipalities in which such properties are located. When notice is published or mailed, it shall include the name and address of owner of the subject parcel; the location address and/or a description of the location such parcel; a brief description of the nature of the pollution on the subject parcel; a brief description of the proposed engineered control; and a brief description of the procedures for requesting a hearing. When notice is provided by posting a sign, the sign shall include the words ''Environmental remediation is proposed for this site. For further information contact...'' and shall include the name and telephone number of an individual from whom any interested person may obtain information about the remediation. The owner of the subject parcel shall verify to the Commissioner in writing on a form furnished by him that notice has been given in accordance with this subsection.

(B) A request to use an engineered control shall be submitted to the Commissioner in writing and shall be accompanied by a detailed written report and plan which demonstrates that:

(i) (aa) the proposed engineered control is designed and will be constructed to physically isolate polluted soil and to minimize migration of liquids through soil,

to function with minimum maintenance, to promote drainage and minimize erosion of or other damage to such control, and to accommodate settling and subsidence of the underlying soil so as to maintain the control's structural integrity and permeability; and (bb) with respect to an engineered cap, such cap has been designed and constructed to have a permeability of less than 10^{-6} cm/sec or, unless otherwise specified by the Commissioner in writing, to have the permeability specified in a closure plan implemented under sections 22a-209-1 et seq of the Regulations of Connecticut State Agencies for a release area which is a lawfully authorized solid waste disposal area;

(ii) plans for ground-water monitoring at the subject release area are adequate to ensure that any substance migrating therefrom will be detected;

(iii) plans for maintenance of the subject release area are adequate to ensure that the structural integrity, design permeability, and effectiveness of the engineered control will be maintained; such plans shall include without limitation measures to prevent run-on and run-off of storm water from eroding or otherwise damaging the engineered control and measures to repair such control to correct the effects of any settling, subsidence, erosion or other damaging events or conditions;

(iv) an environmental land use restriction is or will be in effect with respect to the parcel at which the subject release area is located, which restriction ensures that such parcel will not be used in a manner that could disturb the engineered control or the polluted soil;

(v) any other information that the Commissioner reasonably deems necessary; and

(vi) with respect to any release area subject to any of the requirements of section 22a-209-4(i) or section 22a-449(c)-100 through 110 of the Regulations of Connecticut State Agencies, all such requirements are or will be satisfied. With respect to a release area which is not subject to any such regulations, the owner of the subject parcel shall demonstrate that he has posted or will post a surety in a form and amount approved in writing by the Commissioner, which surety during the first year after installation of the engineered control shall be equal to the cost of one year's maintenance and monitoring of the engineered control, and which in each subsequent year shall be increased in amount by adding an amount equal to the cost of one year's maintenance and monitoring, until the total amount of such surety is equal to the cost of five year's of maintenance and monitoring, which amount shall be maintained in effect for the next twenty-five years or for such other period as may be required by the Commissioner.

(C) When the Commissioner approves a request pursuant to this subsection to use an engineered control he may require that such control incorporate any measures which he deems necessary to protect human health and the environment. Any person implementing an engineered control under this subsection shall perform all actions specified in the approved engineered control proposal including the recordation of the environmental land use restriction and posting of the surety, and any additional measures specified by the Commissioner in his approval of such plan. Nothing in this subdivision shall preclude the Commissioner from taking any action he deems necessary to protect human health or the environment if an approved engineered control fails to prevent the migration of pollutants from the release area or human exposure to such pollutants.

(g) **Removal of Non-aqueous Phase Liquids.**

Removal of light non-aqueous phase liquids from soil and ground water shall be conducted in accordance with section 22a-449(d)-106(f) of the Regulations of Connecticut State Agencies. Any other non-aqueous phase liquid shall be contained or removed from soil and ground water to the maximum extent prudent.

(h) **Use of Polluted Soil and Reuse of Treated Soil.**

Any soil excavated from and/or treated at a release area during remediation shall be managed as follows:

(1) Hazardous Waste.

Treatment, storage, disposal and transportation of soil which is hazardous waste as defined pursuant to section 22a-449(c) of the General Statutes shall be carried out in conformance with the provisions of sections 22a-449(c)-101 through 110 of the Regulations of Connecticut State Agencies, and any other applicable law;

(2) Special Wastes.

In accordance with section 22a-209-8 of the Regulations of Connecticut State Agencies, the Commissioner may authorize polluted soil, which is not hazardous waste as defined pursuant to subsection 22a-449(c) of the General Statutes, to be disposed of as special wastes as defined in said section 22a-209-1.

(3) Polluted soil.

Polluted soil from a release area may be treated to achieve concentrations of substances that do not exceed either the applicable direct exposure criteria or pollutant mobility criteria. After such treatment, such soil may be reused on the parcel from which it was excavated or on another parcel approved by the Commissioner, provided that such reuse is consistent with all other provisions of sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies and:

(A) Prior to reuse, a map showing the location and depth of proposed placement of such soil is submitted to the Commissioner;

(B) Such soil is not placed below the water table;

(C) Such soil is not placed in an area subject to erosion; and

(D) Any such soil in which the concentration of any substance exceeds the pollutant mobility criteria applicable to a GA area is not placed over soil and ground water which have not been affected by a release at the parcel at which placement is proposed; and

(E) For soils polluted with PCB, the Commissioner has issued a written approval in accordance with by section 22a-467 of the General Statutes.

(4) Natural Soil.

Polluted soil may be used at any parcel of land if after treatment of such soil to reduce or remove substances: (A) any naturally-occurring substance is present therein in concentrations not exceeding background concentration for soil of such substance at the release area from which such soil is removed; and (B) no other substance is detectable in such soil at a concentration greater than its analytical detection limit.

(i) **Additional remediation of soil.**

Nothing in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies shall preclude the Commissioner from taking any action necessary to prevent or abate pollution or to prevent or abate any threat to human health or the environment, including without limitation:

(1) at any location at which, despite remediation in accordance with sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, the Commissioner determines that there is a potential ecological risk he may require that an ecological risk assessment be conducted in accordance with EPA/630/R-92/001, February 1992, ''Framework For Ecological Risk Assessment'' and that additional remediation be conducted to mitigate any risks identified in such assessment;

(2) at any location at which polluted soil has eroded into a surface-water body, the Commissioner may require that the effect of such polluted soil on aquatic life

be assessed and that remediation to protect or restore aquatic life and surface water quality from the effects of such polluted soils be undertaken; or

(3) at any release area or parcel at which there is polluted soil containing multiple polluting substances, the Commissioner may require additional remediation to ensure that the risk posed by such substances does not exceed (A) a cumulative excess lifetime cancer risk of 10^{-5} for carcinogenic substances and (B) a cumulative hazard index of 1 for non-carcinogenic substances with the same target organ.

(Effective January 30, 1996)

Sec. 22a-133k-3. Ground-water remediation standards

(a) **General.**

(1) Remediation of a ground-water plume shall result in the attainment of: (A) the requirements concerning surface water protection set forth in subsection (b) of this section and the requirements concerning volatilization set forth in subsection (c) of this section; or (B) the background concentration for ground water for each substance in such plume.

(2) Remediation of a ground-water plume in a GA area shall also result in the reduction of each substance therein to a concentration equal to or less than the background concentration for ground water of such substance, except as provided in subsection (d) of this section.

(3) Remediation of a ground-water plume in a GB area shall also result in the reduction of each substance therein to a concentration such that such ground-water plume does not interfere with any existing use of the ground water.

(b) **Surface-water protection criteria.**

(1) Except as provided in subdivision (2) of this subsection, remediation of a ground-water plume which discharges to a surface water body shall result in the reduction of each substance therein to a concentration which is consistent with subdivision (2) of subsection (f) of this section and which is equal to or less than the surface-water protection criterion or an alternative surface-water protection criterion established in accordance with subdivision (3) of this subsection.

(2) If a ground-water plume (A) discharges to a wetland or an intermittent stream, or (B) the areal extent of such ground-water plume occupies more than 0.5%, or other percentage which is approved in writing by the Commissioner, of the upstream drainage basin of the stream to which such plume discharges measured from the intersection of stream and such ground-water plume, each substance therein shall be remediated to a concentration equal to or less than the applicable aquatic life criteria contained in Appendix D to the most recent Water Quality Standards, or equal to or less than an alternative water quality criterion adopted by the Commissioner in accordance with section 22a-426 of the General Statutes and paragraph 12b of the Water Quality Standards effective May 15, 1992.

(3) Alternative surface-water protection criteria.

Alternative surface-water criteria may be calculated in accordance with subparagraph (A) of this subdivision or may be approved in writing by the Commissioner in accordance with subparagraph (B) of this subdivision.

(A) An alternative surface-water protection criterion may be calculated for a substance in Appendix D of the most recent Water Quality Standards by multiplying the lower of the human health or aquatic life criterion for such substance in said Appendix D by $[(0.25 \times 7Q10)/Q_{plume}]$ where Q_{plume} is equal to the average daily discharge of polluted ground water from the subject ground-water plume.

(B) The Commissioner may approve an alternative surface-water protection criterion to be applied to a particular substance at a particular release area. Any person

requesting such approval shall submit to the Commissioner: (i) a report on the flow rate, under seven day ten year low flow conditions, of the surface water body into which the subject ground water plume discharges (ii) a report on other surface water or ground water discharges to the surface water body within one-half mile upstream of the areal extent of the ground-water plume, (iii) a report on the instream water quality, (iv) a report on the flow rate of the ground-water discharge from such release area to the surface water body and the extent and degree of mixing of such discharge in such surface water, and (v) and any other information the Commissioner reasonably deems necessary to evaluate such request. The Commissioner shall not approve an alternative surface-water protection criterion under this subparagraph unless the requester demonstrates that such criterion will protect all existing and proposed uses of such surface water.

(c) **Volatilization criteria.**

(1) Except as specified in subdivisions (2), (3), (4) and (5) of this subsection, all ground water polluted with a volatile organic substance within 15 feet of the ground surface or a building, shall be remediated such that the concentration of each such substance is equal to or less than the applicable residential volatilization criterion for ground water.

(2) If ground water polluted with a volatile organic substance is below a building used solely for industrial or commercial activity, such ground water shall be remediated such that the concentration of such substance is equal to or less than the applicable industrial/commercial volatilization criterion for ground water, provided that an environmental land use restriction is in effect with respect to the parcel or portion thereof upon which such building is located, which restriction ensures that the parcel or portion thereof will not be used for any residential purpose in the future and that any future use of the parcel or portion thereof is limited to industrial or commercial activity;

(3) (A) Remediation of a volatile organic substance to the volatilization criterion for ground water shall not be required if the concentration of such substance in soil vapors below a building is equal to or less than (i) the residential volatilization criterion for soil vapor or (ii) the industrial/commercial volatilization criterion for soil vapor, if such building is solely used for industrial or commercial activity and, an environmental land use restriction is in effect with respect to the parcel or portion thereof upon which such building is located, which restriction ensures that the parcel or portion thereof will not be used for any residential purpose in the future and that any future use of the parcel or portion thereof is limited to industrial or commercial activity.

(B) The requirements of subdivision (1), (2), and (3) of this subsection do not apply if: (i) measures acceptable to the Commissioner have been taken to prevent the migration of such substance into any overlying building, (ii) a program is implemented to maintain and monitor all such measures, and (iii) notice of such measures has been submitted to the Commissioner on a form furnished by him which notice includes (aa) a brief description of the areal extent of the ground-water plume and of the area which exceeds any such volatilization or soil vapor criterion; (bb) a brief description of the method of controlling the migration of such substance into any overlying building; (cc) a plan for the monitoring and maintenance of such control method; and (dd) a map showing all existing buildings, the areal extent of the ground-water plume, and the location of such control method.

(4) Site-specific and alternative volatilization criteria.

(A) Site-specific residential volatilization criteria for ground water or soil vapor may be calculated using the equations in Appendix G to sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

(B) The Commissioner may approve an alternative volatilization criterion for ground water or for soil vapor to be applied to a substance at a particular release area. The Commissioner shall not approve any alternative criterion under this subparagraph unless it has been demonstrated that such criterion will ensure that volatile organic substances from such ground water or soil do not accumulate in the air of any structure used for residential activities at a concentration which, (i) for any carcinogenic substance creates a risk to human health in excess of a 10^{-6} excess lifetime cancer risk level, and for any non-carcinogenic substance does not exceed a hazard index of 1, or (ii) for a ground-water plume polluted with multiple volatile organic substances does not exceed a cumulative excess cancer risk level of 10^{-5} for carcinogenic substances, and for non-carcinogenic substances with the same target organ, the cumulative hazard index does not exceed 1.

(5) Exemption from volatilization criteria.

(A) The volatilization criteria do not apply to ground water polluted with volatile organic substances, where the water table is less than fifteen feet below the ground surface, if no building exists over the ground water polluted with volatile organic substances at a concentration above the applicable volatilization criteria, and (i) it has been documented that best efforts have been made to ensure that each owner of any parcel of land or portion thereof overlying such polluted ground water records an environmental land use restriction which ensures that no building is constructed over such polluted ground water; or (ii) the Commissioner has approved in writing a request demonstrating that no building can reasonably be expected to be constructed over the subject ground water or that natural attenuation or other methods of remediation will, within five years, reduce the concentration of volatile organic substances in such ground water to a concentration equal to or less than the applicable volatilization criteria.

(B) The volatilization criteria for ground water underlying an existing building do not apply to ground water polluted with volatile organic substances where the Commissioner has approved in writing and there have been implemented an indoor air monitoring program and measures to control the level of any such volatile organic substances in the air of the subject building.

(i) Any person seeking the Commissioner's approval of an indoor air monitoring program shall submit to him: a detailed written plan describing the proposed indoor air monitoring program, including but not limited to a description of the distribution and concentration of volatile organic compounds beneath the building, the location of proposed monitoring points, the proposed frequency of monitoring, the parameters to be monitored, and a description of proposed actions to be taken in the event such monitoring indicates that the monitored parameters exceed proposed specified concentrations and a proposed schedule for reporting to the Commissioner on the results of such monitoring for as long as monitoring is conducted at the site.

(ii) In approving any indoor air monitoring program pursuant to this subdivision, the Commissioner may impose any additional conditions he deems necessary to ensure that the program adequately protects human health. In the event that the Commissioner approves an indoor air monitoring program pursuant to this subparagraph, any person implementing such program shall perform all actions specified in the approved plan, and any additional measures specified by the Commissioner in his approval of such plan.

(d) **Applicability of Ground-water Protection Criteria.**

(1) Ground water in a GA area may be remediated to a concentration for each substance therein equal to or less than the ground-water protection criterion for each such substance if, with respect to the subject ground-water plume: (A) the background concentration for ground water is equal to or less than such ground-water protection criterion; (B) a public water supply distribution system is available within 200 feet of the subject parcel, parcels adjacent thereto, and any parcel within the areal extent of such plume; (C) such ground-water plume is not located in an aquifer protection area; and (D) such ground-water plume is not located within the area of influence of any public water supply well.

(2) If prior to any ground-water remediation the maximum concentration of a substance in a ground-water plume in a GA area is equal to or less than the ground-water protection criteria, remediation of ground water to achieve background ground-water concentration is not required, provided that the extent of the ground-water plume is not increasing over time and, except for seasonal variations, the concentration of the subject substance in such ground-water plume is not increasing at any point over time.

(3) Any ground water in a GB area and which is used for drinking or other domestic purposes shall be remediated to reduce the concentration of each substance therein to a concentration equal to or less than the applicable ground-water protection criterion until such time as the use of such ground water for drinking or other domestic purposes is permanently discontinued.

(e) **Technical Impracticability of Ground-water Remediation.**

(1) Exemption from Background Due to Technical Impracticability

If remediation of a ground-water plume in a GA area to achieve compliance with subdivision (2) of subsection (a) of this section has reduced the concentration of a polluting substance to less than the ground-water protection criterion, and if further reduction of such concentration is technically impracticable, no further remediation of such ground-water plume for such substance shall be required.

(2) Variance Due to Technical Impracticability of Ground-water Remediation

The Commissioner may grant a variance from any of the requirements of this section if he finds that: non-aqueous phase liquids that cannot be contained or removed in accordance with R.C.S.A. section 22a-133k-2(g) are present; remediation to the extent technically practicable has reduced the concentration of pollutants in ground water to steady-state concentrations that exceed any applicable criteria; or achieving compliance with the applicable criteria is technically impracticable as determined using Directive No. 9234.2-25 issued September 1993 by the U.S. Environmental Protection Agency's Office of Solid Waste and Emergency Response.

(A) Any person requesting a variance pursuant to this subsection from any ground-water protection criterion shall submit: (i) information concerning the concentration of each substance in the ground-water plume with respect to which a variance is sought; (ii) information demonstrating that (aa) the extent of the ground-water plume which exceeds such ground-water protection criterion has been reduced to the extent technically practicable, or (bb) it is not technically practicable to reduce the extent of the ground-water plume; (iii) the results of a study conducted to determine the risks to human health posed by the polluted ground water remaining after such reduction; (iv) if such study shows a risk or a potential risk to human health, a plan to eliminate such risk or potential risk; (v) an application to change the ground-water classification of such polluted ground water to GB in accordance with section 22a-426 of the General Statutes; and (vi) any other information the Commissioner reasonably deems necessary to evaluate such request.

(B) Any person requesting a variance pursuant to this subsection from the requirement to remediate ground water to a concentration which does not exceed the applicable surface-water protection criteria shall submit information concerning the concentration of each substance in the ground-water plume with respect to which a variance is sought. If such information demonstrates that any such concentration exceeds any applicable surface-water protection criterion, such person shall also submit: (i) a map showing the areal extent of the ground-water plume that exceeds such surface-water protection criterion, and (ii) a plan for controlling the migration of such substance to the receiving surface water body.

(C) If the Commissioner grants a variance pursuant to this subsection from any ground-water protection criterion, the person receiving the variance shall, no later than thirty days after the date of granting of such variance, submit to the Commissioner on a form prescribed and provided by him: (i) certification that written notice of the extent and degree of such pollution has been provided to each owner of property overlying the subject ground-water plume at which it is not technically practicable to remediate a substance to a concentration equal to or less than the ground-water protection criterion; (ii) certification that written notice of the presence of pollution on each such parcel and a description of the extent and degree of such pollution has been sent to the Director of Health of the municipality or municipalities in which the ground-water plume is located; and (iii) certification that best efforts have been made to ensure that each owner of property overlying the subject ground-water plume records an environmental land use restriction which ensures that the subject ground-water plume is not used for drinking or other domestic purposes;

(D) If the Commissioner grants a variance pursuant to this subsection from the requirement to remediate ground water to a concentration which does not exceed the applicable surface-water protection criteria, the person receiving the variance shall perform all actions specified in the plan submitted with the request for such variance, and any additional actions required by the Commissioner in his approval of such plan or granting of such variance.

(f) **Applying the Criteria for Ground Water**

(1) Compliance with the ground-water protection criterion for a substance in ground water or background concentration for ground water for such substance is achieved when the sampling locations are representative of the subject ground-water plume and (A) the analytical results for such substance at such all sampling locations are equal to or less than either the ground-water protection criterion for such substance or the background concentration for ground water therefor, whichever is applicable, for at least four consecutive quarterly sampling periods, or (B) a representative sampling program consisting of not less than twelve consecutive monthly samples from each such sampling location has been used to characterize the ground-water plume and the ninety-five percent upper confidence level of the arithmetic mean of all results of laboratory analyses of such samples for such substance are equal to or less than the criterion for such substance and that no single sample exceeds two times the applicable criterion for such substance.

(2) Compliance with a surface-water protection criterion for a substance in ground water is achieved when the sampling locations are representative of the subject ground-water plume and (A) the average concentration of such substance in such plume is equal to or less than the applicable surface-water protection criterion for at least four consecutive quarterly sampling periods, or (B) the concentration of such substance in that portion of such plume which is immediately upgradient of the point at which such ground-water discharges to the receiving surface-water body

is equal to or less than the applicable surface-water protection criterion, provided that the areal extent of such ground-water plume is not increasing over time and that, except for seasonal variations, the concentration of the subject substance in such ground-water plume is not increasing, except as a result of natural attenuation, at any point over time.

(3) Compliance with a volatilization criterion for a substance in ground water or soil vapor is achieved when the sampling locations are representative of the subject ground-water plume or soil vapor and (A) the ninety-five percent upper confidence level of the arithmetic mean of all sample results from such locations is equal to or less than the applicable volatilization criterion for at least four consecutive quarterly sampling periods and that the result of no single sample exceeds two times the applicable volatilization criterion, or (B) the results of all laboratory analyses of samples for such substance are equal to or less than the volatilization criterion therefor.

(4) Matrix interference effects.

If any applicable criterion for a substance in ground water is less than the concentration for such substance that can be consistently and accurately quantified in a specific sample due to matrix interference effects, the following action shall be taken:

(A) (i) ''Test Methods for Evaluating Solid Waste : Physical/Chemical Methods,'' SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C. 20460 shall be consulted to determine if an analytical method sufficiently sensitive to achieve the applicable analytical detection limit was used to conduct the analysis of the subject substance. If there is available an alternative analytical method which is sufficient to achieve the required analytical detection limit, appropriate for the sample matrix, and has been approved by EPA or approved in writing by the Commissioner, the subject ground water shall be re-analyzed for the subject substance using such alternative method.

(ii) If a sample has been analyzed by one or more analytical methods in accordance with subparagraph (A) (i) of this subdivision and the applicable analytical detection limit has not been achieved due to matrix interference effects, such method(s) shall be modified in order to compensate for such interferences, in accordance with analytical procedures specified by EPA within the scope of the analytical method.

(B) If, after re-analyzing the subject ground water and attempting to compensate for matrix interference effects in accordance with subparagraph (A) of this subdivision, any applicable criterion for a substance in ground water is less than the concentration for such substance that can be consistently and accurately quantified in a specific sample due to matrix interference effects, compliance with such criterion shall be achieved when such ground water has been remediated to the lowest concentration for such substance which can be consistently and accurately quantified without matrix interference effects.

(C) A detailed summary of all measures taken to overcome matrix interference effects and a determination of the lowest alternative quantification level applicable to the analysis of such substance shall be prepared and, if requested by the Commissioner in writing, shall be submitted to the Commissioner for his review and approval.

(g) **Ground-water Monitoring.**

For any remediation which is conducted to achieve compliance with sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies, ground-water monitoring shall be conducted in accordance with this subsection.

(1) Ground-water Monitoring at GA Areas.

With respect to remediation of a release area or a ground-water plume in a GA area, a ground-water monitoring plan shall be prepared and implemented. Ground-water monitoring under such plan shall be designed to determine:

(A) the effectiveness of soil remediation in preventing the pollution of ground water by substances from the release area;

(B) the effectiveness of any remediation taken to eliminate or minimize health or safety risks identified in any risk assessment conducted in accordance with subdivision (2) of subsection (e) of this section or otherwise identified; and

(C) whether applicable requirements identified in subsection (a) of this section have been met.

(2) Ground-water Monitoring at GB Areas.

With respect to remediation of a release area or a ground-water plume in a GB area, a ground-water monitoring plan shall be prepared and implemented. Ground-water monitoring under such plan shall be designed to determine:

(A) the effectiveness of soil remediation in preventing further pollution of ground water by substances from the release area;

(B) the effectiveness of any remediation taken to eliminate or minimize identified health or safety risks associated with such release;

(C) whether applicable ground-water protection criteria, surface-water protection criteria, and volatilization criteria have been met; and

(D) whether the ground-water plume interferes with any existing use of the ground water for a drinking water supply or with any other existing use of the ground water, including but not limited to industrial, agricultural or commercial purposes.

(3) Discontinuation of Ground-water Monitoring.

(A) Unless otherwise specified in writing by the Commissioner, ground-water monitoring in a GA area may be discontinued in accordance with the following:

(i) a minimum of one year after compliance with the background concentration for ground water has been achieved in accordance with subsection (f) of this section if the background concentration for ground water of all substances in the subject ground-water plume has been maintained in all sampling events and ground-water monitoring data demonstrate that the soil remediation was effective in preventing the pollution of ground water by any substance from the subject release area; or

(ii) a minimum of three years after compliance with the ground-water protection criteria has been achieved in accordance with subsection (f) of this section if (aa) all applicable ground-water protection criteria for all subject substances or the background concentration for ground water for all substances in the subject ground-water plume, which ever is higher, is maintained in all sampling events; (bb) ground-water monitoring data demonstrate that the soil remediation was effective in preventing the pollution of ground water by substances from the subject release area; and (cc) the volatilization and surface-water protection criteria have been met in accordance with subsection (f) of this section.

(B) Unless otherwise specified in writing by the Commissioner, ground-water monitoring in a GB area may be discontinued two years after the cessation of all remediation of such ground water or soil if the applicable surface-water protection and volatilization criteria have been met in accordance with subsection (f) of this section, and such ground water is suitable for all existing uses.

(h) **Additional Polluting Substances**

(1) With respect to a substance in ground water for which a ground-water protection criterion is not specified in sections 22a-133k-1 through 22a-133k-3, inclusive,

of the Regulations of Connecticut State Agencies, the Commissioner may approve in writing a ground-water protection criterion to apply to such substance. Any person requesting approval of a ground-water protection criterion for such substance shall submit to the commissioner (A) a risk-based ground-water protection criterion for such substance calculated in accordance with subdivision (2) of this subsection, (B) the analytical detection limit for such substance, (C) a description of the organoleptic properties of such substance. Before approving a ground-water protection criterion the Commissioner shall consider the proposed risk-based ground-water protection criterion for such substance, the analytical detection limit for such substance, the organoleptic effects of such substance, any information about the health effects such substance may cause due to exposure pathways not accounted for in the proposed risk-based ground-water protection criterion, and any other information that the Commissioner reasonably deems necessary.

(2) The risk-based ground-water protection criterion shall be calculated using the following equations:

(A) For carcinogenic substances;

$$GWPC = \left[\frac{Risk}{CSF} \right] x \left[\frac{BW \text{ x } AT}{IR \text{ x } EF \text{ x } ED \text{ x } CF} \right]$$

(B) For non-carcinogenic substances:

$$GWPC = \left[Rfd \text{ x } HI \right] x \left[\frac{BW \text{ x } AT}{IR \text{ x } EF \text{ x } ED \text{ x } CF \text{ x } SA} \right]$$

(C) The abbreviations used in subparagraphs (A) and (B) of this subdivision shall be interpreted in accordance with the following table and shall be assigned the values specified therein:

Term	Description	Units	Value
$GWPC_{RB}$	Risk-based Ground-water protection Criterion	ug/l	calculated
Risk	Target Cancer Risk Level	unitless	1.0E-06
HI	Hazard Index	unitless	1.0
CSF	Cancer slope Factor	$(mg/kg\text{-}day)^{-1}$	substance-specific
RFD	Reference Dose	mg/kg-day	substance-specific
IR	Ingestion Rate	l/day	2
EF	Exposure Frequency	days/year	365
ED	Exposure Duration	years	70
CF	Conversion Factor	unitless	1000
BW	Body Weight	kg	70
AT	Averaging Time,	days	25550
SA	Source Allocation	unitless	0.2

(i) **Additional Remediation of Ground Water.**

Nothing in sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies shall preclude the Commissioner from taking any action necessary to prevent or abate pollution, or to prevent or abate any threat to human health or the environment. If the presence of any substance impairs the aesthetic quality of any ground water which is or can reasonably be expected to be a source of water for drinking or other domestic use, additional remediation shall be conducted in order to reduce the concentration of such substance to a concentration appropriate for such use.

(Effective January 30, 1996)

Appendix A to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of
Connecticut State Agencies
Direct Exposure Criteria for Soil

Substance	Residential Criteria in mg/kg (ppm)	Industrial/ Commercial Criteria in mg/kg (ppm)
Volatile Organic Substances		
Acetone	500	1000
Acrylonitrile	1.1	11
Benzene	21	200
Bromoform	78	720
2-Butanone(MEK)	500	1000
Carbon tetrachloride	4.7	44
Chlorobenzene	500	1000
Chloroform	100	940
Dibromochloromethane	7.3	68
1,2-Dichlorobenzene	500	1000
1,3-Dichlorobenzene	500	1000
1,4-Dichlorobenzene	26	240
1,1-Dichloroethane	500	1000
1,2-Dichloroethane	6.7	63
1,1-Dichloroethylene	1	9.5
cis-1,2-Dichloroethylene	500	1000
trans-1,2-Dichloroethylene	500	1000
1,2-Dichloropropane	9	84
1,3-Dichloropropene	3.4	32
Ethylbenzene	500	1000

Substance	Residential Criteria in mg/kg (ppm)	Industrial/ Commercial Criteria in mg/kg (ppm)
Ethylene dibromide (EDB)	0.007	0.067
Methyl-tert-butyl-ether	500	1000
Methyl isobutyl ketone	500	1000
Methylene chloride	82	760
Styrene	500	1000
1,1,1,2-Tetrachloroethane	24	220
1,1,2,2-Tetrachloroethane	3.1	29
Tetrachloroethylene	12	110
Toluene	500	1000
1,1,1-Trichloroethane	500	1000
1,1,2-Trichloroethane	11	100
Trichloroethylene	56	520
Vinyl chloride	0.32	3
Xylenes	500	1000
Semivolatile Substances		
Acenaphthylene	1000	2500
Anthracene	1000	2500
Benzo(a)anthracene	1	7.8
Benzo(b)fluoranthene	1	7.8
Benzo(k)fluoranthene	8.4	78
Benzo(a)pyrene	1	1

Substance	Residential Criteria in mg/kg (ppm)	Industrial/ Commercial Criteria in mg/kg (ppm)
Bis(2-chloroethyl)ether	1	5.2
Bis(2-chloroisopropyl) ether	8.8	82
Bis(2-ethyl hexyl) phthalate	44	410
Butyl benzl phthalate	1000	2500
2-chlorophenol	340	2500
Di-n-butyl phthalate	1000	2500
Di-n-octyl phthalate	1000	2500
2,4-Dichlorophenol	200	2500
Fluoranthene	1000	2500
Fluorene	1000	2500
Hexachloroethane	44	410
Hexachlorobenzene	1	3.6
Naphthalene	1000	2500
Pentachlorophenol	5.1	48
Phenanthrene	1000	2500
Phenol	1000	2500
Pyrene	1000	2500
Inorganic Substances		
Antimony	27	8200
Arsenic	10	10
Barium	4700	140000

Substance	Residential Criteria in mg/kg (ppm)	Industrial/ Commercial in mg/kg (ppm)
Beryllium	2	2
Cadmium	34	1000
Chromium, trivalent	3900	51000
Chromium, hexavalent	100	100
Copper	2500	76000
Cyanide	1400	41000
Lead	500	1000
Mercury	20	610
Nickel	1400	7500
Selenium	340	10000
Silver	340	10000
Thallium	5.4	160
Vanadium	470	14000
Zinc	20000	610000
Pesticides, PCB's, and Total Petroleum Hydrocarbons (TPH)		
Alachlor	7.7	72
Aldicarb	14	410
Atrazine	2.8	26
Chlordane	0.49	2.2
Dieldrin	0.038	0.36
Endrin	20	610
2-4 D	680	20000

Substance	Residential Criteria in mg/kg (ppm)	Industrial/ Commercial in mg/kg (ppm)
Heptachlor epoxide	0.067	0.63
Heptachlor	0.14	1.3
Lindane	20	610
Methoxychlor	340	10000
Toxaphene	0.56	5.2
PCB's	1	10
TPH	500	2500

Appendix B to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of
Connecticut State Agencies
Pollutant Mobility Criteria for Soil

Substance	GA, GAA Mobility Criteria in mg/kg (ppm)	GB Mobility Criteria in mg/kg (ppm)
Volatile Organic Substances		
Acetone	14	140
Acrylonitrile	0.01	0.1
Benzene	0.02	0.2
Bromoform	0.08	0.8
2-Butanone(MEK)	8	80
Carbon tetrachloride	0.1	1
Chlorobenzene	2	20
Chloroform	0.12	1.2
Dibromochloromethane	0.01	0.1
1,2-Dichlorobenzene	3.1	3.1
1,3-Dichlorobenzene	12	120
1,4-Dichlorobenzene	1.5	15
1,1-Dichloroethane	1.4	14
1,2-Dichloroethane	0.02	0.2
1,1-Dichloroethylene	0.14	1.4
cis-1,2-Dichloroethylene	1.4	14
trans-1,2-Dichloroethylene	2	20
1,2-Dichloropropane	0.1	1.0
1,3-Dichloropropene	0.01	0.1
Ethyl benzene	10.1	10.1
Ethylene dibromide (EDB)	0.01	0.1
Methyl-tert-butyl-ether	2	20
Methyl isobutyl ketone	7	14
Methylene chloride	0.1	1.0
Styrene	2	20
1,1,1,2-Tetrachloroethane	0.02	0.2

Substance	GA, GAA Mobility Criteria in mg/kg (ppm)	GB Mobility Criteria in mg/kg (ppm)
1,1,2,2-Tetrachloroethane	0.01	0.1
Tetrachloroethylene	0.1	1
Toluene	20	67
1,1,1-Trichloroethane	4	40
1,1,2-Trichloroethane	0.1	1
Trichloroethylene	0.1	1.0
Vinyl chloride	0.04	0.40
Xylenes	19.5	19.5
Semivolatile Substances		
Acenaphthylene	8.4	84
Anthracene	40	400
Benzo(a)anthracene	1	1
Benzo(b)fluoranthene	1	1
Benzo(k)fluoranthene	1	1
Benzo(a)pyrene	1	1
Bis(2-chloroethyl)ether	1	2.4
Bis(2-chloroisopropyl)ether	1	2.4
Bis(2-ethyl hexyl)phthalate	1	11
Butyl benzl phthalate	20	200
2-chlorophenol	1	7.2
Di-n-butyl phthalate	14	140
Di-n-octyl phthalate	2	20
2,4-Dichlorophenol	1	4
Fluoranthene	5.6	56
Fluorene	5.6	56
Hexachloroethane	1	1
Hexachlorobenzene	1	1
Naphthalene	5.6	56
Pentachlorophenol	1	1
Phenanthrene	4	40
Phenol	80	800
Pyrene	4	40

Substance	GA, GAA Mobility Criteria in mg/kg (ppm)	GB Mobility Criteria in mg/kg (ppm)
Pesticides and TPH		
Alachlor	0.230	0.4
Aldicarb	1	1
Atrazine	0.2	0.2
Chlordane	0.066	0.066
Dieldrin	0.007	0.007
2-4 D	1.4	14
Heptachlor epoxide	0.02	0.02
Heptachlor	0.013	0.013
Lindane	0.02	0.04
Methoxychlor	0.8	8
Simazine	0.8	8
Toxaphene	0.33	0.6
Total Petroleum Hydrocarbon By EPA Method 418.1 or another EPA-approved method acceptable to the Commissioner	500	2500
Inorganic Substances and PCB	**GA, GAA Mobility Criteria By TCLP or by SPLP in mg/l (ppm)**	**GB Mobility Criteria By TCLP or by SPLP in mg/l (ppm)**
Antimony	0.006	0.06
Arsenic	0.05	0.5
Barium	1	10.0
Beryllium	0.004	0.04
Cadmium	0.005	0.05
Chromium, total	0.05	0.5
Copper	1.3	13
Cyanide (by SPLP only)	0.2	2
Lead	0.015	0.15
Mercury	0.002	0.02
Nickel	0.1	1.0
Selenium	0.05	0.5

Substance	GA, GAA Mobility Criteria By TCLP or by SPLP in mg/l (ppm)	GB Mobility Criteria By TCLP or by SPLP in mg/l (ppm)
Silver	0.036	0.36
Thallium	0.005	0.05
Vanadium	0.05	0.50
Zinc	5	50
PCB	0.0005	0.005

Appendix C to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of
Connecticut State Agencies
Ground-Water Protection Criteria for GA and GAA Areas

Substance	Ground-water Protection Criteria in ug/l (ppb)
Volatile Organic Substances	
Acetone	700
Acrylonitrile	0.5
Benzene	1
Bromoform	4
2-Butanone(MEK)	400
Carbon tetrachloride	5
Chlorobenzene	100
Chloroform	6
Dibromochloromethane	0.5
1,2-Dichlorobenzene	600
1,3-Dichlorobenzene	600
1,4-Dichlorobenzene	75
1,1-Dichloroethane	70
1,2-Dichloroethane	1
1,1-Dichloroethylene	7
cis-1,2-Dichloroethylene	70
trans-1,2-Dichloroethylene	100
1,2-Dichloropropane	5
1,3-Dichloropropene	0.5
Ethyl benzene	700
Ethylene dibromide (EDB)	0.05
Methyl-tert-butyl-ether	100
Methyl isobutyl ketone	350
Methylene chloride	5
Styrene	100
1,1,1,2-Tetrachloroethane	1
1,1,2,2-Tetrachloroethane	0.5
Tetrachloroethylene	5

Substance	Ground-water Protection Criteria in ug/l (ppb)
Toluene	1000
1,1,1-Trichloroethane	200
1,1,2-Trichloroethane	5
Trichloroethylene	5
Vinyl chloride	2
Xylenes	530
Semivolatile Substances	
Acenaphthylene	420
Anthracene	2000
Benzo(a)anthracene	0.06
Benzo(b)fluoranthene	0.08
Benzo(k)fluoranthene	0.5
Benzo(a)pyrene	0.2
Bis(2-chloroethyl)ether	12
Bis(2-chloroisopropyl)ether	12
Bis(2-ethyl hexyl)phthalate	2
Butyl benzl phthalate	1000
2-chlorophenol	36
Di-n-butyl phthalate	700
Di-n-octyl phthalate	100
2,4-Dichlorophenol	20
Fluoranthene	280
Fluorene	280
Hexachloroethane	3
Hexachlorobenzene	1
Naphthalene	280
Pentachlorophenol	1
Phenanthrene	200
Phenol	4000
Pyrene	200

Substance	Ground-water Protection Criteria in ug/l (ppb)
Inorganic Substances	
Antimony	6
Arsenic	50
Asbestos in mfl	7 (mfl)
Barium	1000
Beryllium	4
Cadmium	5
Chromium (total)	50
Copper	1300
Cyanide	200
Lead	15
Mercury	2
Nickel	100
Selenium	50
Silver	36
Thallium	5
Vanadium	50
Zinc	5000
Pesticides, PCB and Total Petroleum Hydrocarbons	
Alachlor	2
Aldicarb	3
Atrazine	3
Chlordane	0.3
Dieldrin	0.002
2-4 D	70
Heptachlor epoxide	0.2
Heptachlor	0.4
Lindane	0.2
Methoxychlor	40
Simazine	4
Toxaphene	3

Substance	Ground-water Protection Criteria in ug/l (ppb)
PCB's	0.5
Total Petroleum Hydrocarbon By EPA Method 418.1 or another EPA-approved method acceptable to the Commissioner	500

Appendix D to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of
Connecticut State Agencies
Surface-water Protection Criteria for Substances in Ground Water

Substance	Surface-Water Protection Criteria in ug/l (ppb)
Volatile Organic Substances	
Acrylonitrile	20
Benzene	710
Bromoform	10800
Carbon tetrachloride	132
Chlorobenzene	420000
Chloroform	14100
Dibromochloromethane	1020
1,2-Dichlorobenzene	170000
1,3-Dichlorobenzene	26000
1,4-Dichlorobenzene	26000
1,2-Dichloroethane	2970
1,1-Dichloroethylene	96
1,3-Dichloropropene	34000
Ethylbenzene	580000
Methylene chloride	48000
1,1,2,2-Tetrachloroethane	110
Tetrachloroethylene	88
Toluene	4000000
1,1,1-Trichloroethane	62000
1,1,2-Trichloroethane	1260
Trichloroethylene	2340
Vinyl chloride	15750
Semivolatile Substances	
Acenaphthylene	0.3
Anthracene	1100000
Benzo(a)anthracene	0.3
Benzo(b)fluoranthene	0.3
Benzo(k)fluoranthene	0.3

Substance	Surface-Water Protection Criteria in ug/l (ppb)
Benzo(a)pyrene	0.3
Bis(2-chloroethyl) ether	42
Bis(2-chloroisopropyl) ether	3400000
Bis(2-ethyl hexyl)phthalate	59
Di-n-butyl phthalate	120000
2,4-Dichlorophenol	15800
Fluoranthene	3700
Fluorene	140000
Hexachloroethane	89
Hexachlorobenzene	0.077
Phenanthrene	0.077
Phenol	92000000
Pyrene	110000
Inorganic Substances	
Antimony	86000
Arsenic	4
Asbestos (in mfl)	7 mfl
Beryllium	4
Cadmium	6
Chromium, trivalent	1200
Chromium, hexavalent	110
Copper	48
Cyanide	52
Lead	13
Mercury	0.4
Nickel	880
Selenium	50
Silver	12
Thallium	63
Zinc	123

Substance	Surface-Water Protection Criteria in ug/l (ppb)
Pesticides and PCB	
Chlordane	0.3
Dieldrin	0.1
Endrin	0.1
Heptachlor epoxide	0.05
Heptachlor	0.05
Toxaphene	1
PCB's	0.5

Appendix E to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of
Connecticut State Agencies
Volatilization Criteria for Ground Water

Volatile Substance	Residential Volatilization Criteria for Ground water in parts per billion	Industrial/Commercial Volatilization Criteria for Ground water in parts per billion
Acetone	50000	50000
Benzene	215	530
Bromoform	920	3800
2-Butanone (MEK)	50000	50000
Carbon Tetrachloride	16	40
Chlorobenzene	1800	6150
Chloroform	287	710
1,2-Dichlorobenzene	30500	50000
1,3-Dichlorobenzene	24200	50000
1,4-Dichlorobenzene	50000	50000
1,1-Dichloroethane	34600	50000
1,2-Dichloroethane	21	90
1,1-Dichloroethylene	1	6
1,2-Dichloropropane	14	60
1,3-Dichloropropene	6	25
Ethyl benzene	50000	50000
Ethylene dibromide (EDB)	4	16
Methyl-tert-butyl-ether	50000	50000
Methyl isobutyl ketone	50000	50000
Methylene chloride	50000	50000
Styrene	580	2065
1,1,1,2-Tetrachloroethane	12	50
1,1,2,2-Tetrachloroethane	23	100
Tetrachloroethylene	1500	3820
Toluene	23500	50000
1,1,1-Trichloroethane	20400	50000
1,1,2-Trichloroethane	8000	19600

Volatile Substance	Residential Volatilization Criteria for Ground water in parts per billion	Industrial/Commercial Volatilization Criteria for Ground water in parts per billion
Trichloroethylene	219	540
Vinyl chloride	2	2
Xylenes	21300	50000

Appendix F to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of
Connecticut State Agencies
Volatilization Criteria for Soil Vapor

Volatile Substance	Residential Volatilization Criteria for Soil Vapor in parts per million	Industrial/Commercial Volatilization Criteria for Soil Vapor in parts per million
Acetone	2400	8250
Benzene	1	113
Bromoform	1.5	6
2-Butanone (MEK)	2400	8285
Carbon Tetrachloride	1	2.7
Chlorobenzene	31	106
Chloroform	4.5	10.4
1,2-Dichlorobenzene	240	818
1,3-Dichlorobenzene	240	818
1,4-Dichlorobenzene	950	3270
1,1-Dichloroethane	850	3037
1,2-Dichloroethane	1	1
1,1-Dichloroethylene	1	1
1,2-Dichloropropane	1	1
1,3-Dichloropropene	1	1
Ethyl benzene	1650	5672
Ethylene dibromide (EDB)	1	1
Methyl-tert-butyl-ether	1000	3415
Methyl isobutyl ketone	140	480
Methylene chloride	1200	2907
Styrene	8	28
1,1,1,2-Tetrachloroethane	1	1.5
1,1,2,2- Tetrachloroethane	1	1
Tetrachloroethylene	11	27
Toluene	760	2615

Volatile Substance	Residential Volatilization Criteria for Soil Vapor in parts per million	Industrial/Commercial Volatilization Criteria for Soil Vapor in parts per million
1,1,1-Trichloroethane	1310	4520
1,1,2-Trichloroethane	40	93
Trichloroethylene	7	16
Vinyl chloride	1	1
Xylenes	500	1702

Appendix G to
Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies
Equations, Terms and Values for Calculating Site-specific Volatilization Criteria for Ground Water and Soil Vapor

Volatilization Criteria for Ground Water

Site-Specific Volatilization Criteria for Ground Water may be calculated using the following equations:

$$GWC = TAC / (1000 \cdot VF_{GW})$$

$$VF_{GW} = \frac{H\,[(D_{EFF\,WS}/L_{GW})/(ER \cdot L_B)] \cdot 1000}{1+[(D_{EFF\text{-}WS}/L_{GW})/(ER \cdot L_B)] + [(D_{EFF\text{-}WS}/L_{GW})/((D_{EFF\text{-}CRACK}/L_{CRACK}) \cdot \eta)]}$$

$$D_{EFF\,WS} = (h_{cap} + h_v) / [(h_{cap} / D_{EFF\text{-}CAP}) + (h_v / D_{EFF\text{-}S})]$$

$$D_{EFF\text{-}CAP} = D_{AIR} \cdot (\theta_{ACAP}^{3.33} / \theta_T^2) + D_{WATER}/H \cdot (\theta_{WCAP}^{3.33} / \theta_T^2)$$

$$D_{EFF\text{-}S} = D_{AIR} \cdot (\theta_{AS}^{3.33} / \theta_T^2) + D_{WATER}/H \cdot (\theta_{WS}^{3.33} / \theta_T^2)$$

$$D_{EFF\text{-}CRACK} = D_{AIR} \cdot (\theta_{ACRACK}^{3.33} / \theta_T^2) + D_{WATER}/H \cdot (\theta_{WCRACK}^{3.33} / \theta_T^2)$$

Where:

Term	Description	Units	Value
GWC	Ground Water Volatilization Criteria	ug/kg	calculated
TAC	Target Indoor Air Concentration	ug/m^3	**
VF_{GW}	Ground Water Volatilization Factor	mg/m^3	calculated
H	Henry's Law Constant	unitless	substance-specific
$D_{EFF\,WS}$	Effective Diffusion-Ground Water to Soil Surface	cm^2/s	calculated
L_{GW}	Depth to Ground Water ($= h_{CAP} + h_V$)	cm	site-specific
h_{CAP}	Thickness of Capillary Fringe	cm	site-specific
h_V	Thickness of Vadose Zone	cm	site-specific
ER_R	Residential Enclosed Space Air Exchange Rate	1/s	.00014
ER_I	Industrial Enclosed Space Air Exchange Rate	1/s	.00023

Term	Description	Units	Value
L_{BR}	Residential Enclosed Space Volume/Infiltration Area Ratio	cm	site-specific
L_{BI}	Industrial Enclosed Space Volume/Infiltration Area Ratio	cm	site-specific
$D_{EFF-CRACK}$	Effective Diffusion through Foundation Cracks	cm^2/s	calculated
L_{CRACK}	Enclosed Space Foundation or Wall Thickness	cm	site-specific
η	Areal Fraction of Cracks in Foundations / Walls	unitless	.01
$D_{EFF-CAP}$	Effective Diffusion through Capillary Fringe	cm^2/s	calculated
D_{EFF-S}	Effective Diffusion through Soil (In Vapor Phase)	cm^2/s	calculated
D_{AIR}	Diffusion Coefficient in Air	cm^2/s	8.40E-02 or chemical specific
D_{WATER}	Diffusion Coefficient in Water	cm^2/s	1.00E-05 or chemical specific
θ_{ACAP}	Volumetric Air Content in Capillary Fringe	unitless	site-specific
θ_{AS}	Volumetric Air Content in Vadose Zone	unitless	site-specific
θ_{ACRACK}	Volumetric Air Content in Foundation/Wall Cracks	unitless	site-specific
θ_{WCAP}	Volumetric Water Content in Capillary Fringe	unitless	site-specific
θ_{WS}	Volumetric Water Content in Vadose Zone	unitless	site-specific
θ_{WCRACK}	Volumetric Water Content in Foundation/Wall Cracks	unitless	site-specific
θ_T	Total Soil Porosity	unitless	site-specific

**See attached "Table of Target Air Concentrations"

Volatilization Criteria for Soil Vapor

Site-Specific Volatilization Criteria for Soil Vapor may be calculated using the following equations:

$$SSVC = TAC / (1000 \cdot VF_{SSV})$$

$$VF_{SSV} = \frac{[(D_{EFF\,S}/L_S)/(ER \cdot L_B)]}{1+[(D_{EFF\text{-}S}/L_S)/(ER \cdot L_B)] + [(D_{EFF\text{-}S}/L_S)/(D_{EFF\text{-}CRACK}/L_{CRACK}) \cdot \eta]}$$

$$D_{EFF\text{-}S} = D_{AIR} \cdot (\theta_{AS}^{3.33}/\theta_T^2) + D_{WATER}/H \cdot (\theta_{WS}^{3.33}/\theta_T^2)$$

$$D_{EFF\text{-}CRACK} = D_{AIR} \cdot (\theta_{ACRACK}^{3.33}/\theta_T^2) + D_{WATER}/H \cdot (\theta_{WCRACK}^{3.33}/\theta_T^2)$$

Where:

Terms	Description	Units	Value
SSVC	Volatilization Criteria for Soil Vapor	mg/m^3-air	calculated
TAC	Target Indoor Air Concentration	ug/m^3-air	**
VF_{SSV}	Volatilization Factor for Subsurface Vapors	unitless	calculated
H	Henry's Law Constant	unitless	substance-specific
$D_{EFF\,S}$	Effective Diffusion through Soil (in Vapor Phase)	cm^2/s	calculated
L_S	Depth to Soil Vapor Sample	cm	site-specific
ER_R	Residential Enclosed Space Air Exchange Rate	1/s	.00014
ER_I	Industrial Enclosed Space Air Exchange Rate	1/s	.00023
$L_{B\,R}$	Residential Enclosed Space Volume/Infiltration Area Ratio	cm	site-specific
$L_{B\,I}$	Industrial Enclosed Space Volume/Infiltration Area Ratio	cm	site-specific
$D_{EFF\text{-}CRACK}$	Effective Diffusion through Foundation Cracks	cm^2/s	calculated
L_{CRACK}	Enclosed Space Foundation or Wall Thickness	cm	site-specific
η	Areal Fraction of Cracks in Foundations / Walls	unitless	calculated
θ_{AS}	Volumetric Air Content in Vadose Zone	unitless	site-specific
θ_{ACRACK}	Volumetric Air Content in Foundation/Wall Cracks	unitless	site-specific
θ_{WS}	Volumetric Water Content in Vadose Zone	unitless	site-specific
θ_{WCRACK}	Volumetric Water Content in Foundation/Wall Cracks	unitless	site-specific
θ_T	Total Soil Porosity	unitless	site-specific

**See attached ''Table of Target Air Concentrations''

Table of Target Air Concentrations

Volatile Substance	Residential Target Indoor Air Concentration in micrograms per cubic meter	Industrial/Commercial Target Indoor Air Concentration in micrograms per cubic meter
Acetone	8.34 E02	1.17 E03
Benzene	3.25 E00	2.15 E01
Bromoform	2.21 E00	3.72 E00
2-Butanone (MEK)	1.04 E03	1.46 E03
Carbon Tetrachloride	1.00 E00	1.00 E00
Chlorobenzene	2.09 E01	2.92 E01
Chloroform	3.00 E00	3.00 E00
1,2-Dichlorobenzene	2.09 E02	2.92 E02
1,3-Dichlorobenzene	2.09 E02	2.92 E02
1,4-Dichlorobenzene	8.34 E02	1.17 E03
1,1-Dichloroethane	5.21 E02	7.30 E02
1,2-Dichloroethane	9.36 E-02	1.57 E-01
1,1-Dichloroethylene	4.87 E-02	8.18 E-02
1,2-Dichloropropane	1.28 E-01	2.15 E-01
1,3-Dichloropropene	6.58 E-02	1.10 E-01
Ethyl benzene	1.04 E03	1.46 E03
Ethylene dibromide (EDB)	1.11 E-02	1.86 E-02
Methyl-tert-butyl-ether	5.21 E02	7.30 E02
Methyl isobutyl ketone	8.34 E01	1.17 E02
Methylene chloride	6.00 E02	6.00 E02
Styrene	5.00 E00	7.17 E00
1,1,1,2-Tetrachloroethane	3.29 E-01	5.52 E-01
1,1,2,2-Tetrachloroethane	4.20 E-02	7.05 E-02
Tetrachloroethylene	1.10 E01	1.10 E01
Toluene	4.17 E02	5.84 E02

Volatile Substance	Residential Target Indoor Air Concentration in micrograms per cubic meter	Industrial/Commercial Target Indoor Air Concentration in micrograms per cubic meter
1,1,1-Trichloroethane	1.04 E03	1.46 E03
1,1,2-Trichloroethane	3.00 E01	3.00 E01
Trichloroethylene	5.00 E00	5.00 E00
Vinyl chloride	2.90 E-02	4.87 E-02
Xylenes	3.13 E02	4.38 E02

(Effective January 30, 1996)

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Urban Site Remediation Program

Definitions. 22a-133m- 1
Eligible property 22a-133m- 2
Transfer and reuse of remediated property. 22a-133m- 3

Urban Site Remediation Program

Sec. 22a-133m-1. Definitions

As used in section 22a-133m-1 to section 22a-133m-3, inclusive, of these regulations:

(1) ''Manufacturing or economic base business'' shall be construed as defined in section 32-222 (k) of the general statutes.

(2) ''Targeted investment community'' shall be construed as defined in section 32-222 (u) of the general statutes.

(3) ''Commissioner'' means the Commissioner of Economic Development.

(4) ''Transferor'' means the person transferring the interest in the property to the Commissioner.

(5) ''Eligible applicant'' means any manufacturing or economic base business, as defined under sec. 32-222 (f) of the general statutes; and any other for-profit organization or nonprofit organization.

(6) ''Eligible project'' means any existing polluted commercial or industrial property that is proposed to be reused for economic development purposes by an eligible applicant following the remediation of such polluted property pursuant to sections 22a-133m-1 to 22a-133m-3, inclusive, of these regulations.

(7) ''Agreement'' means an agreement between the Commissioner of economic development and an eligible applicant for the remediation and reuse of polluted property pursuant to sections 22a-133m-1 to 22a-133m-3, inclusive, of these regulations.

(8) ''For-profit organization'' means a for-profit partnership or sole proprietorship or corporation which is a manufacturing or economic base business or which has demonstrated to the satisfaction of the commissioner that it has the qualifications, including financial qualifications, necessary to carry out an eligible project.

(9) ''Nonprofit organization'' means a nonprofit corporation as defined in section 33-421 of the general statutes which is organized under the laws of this state and which has demonstrated to the satisfaction of the commissioner that it has the qualifications, including financial qualifications, necessary to carry out an eligible project.

(Effective February 18, 1994)

Sec. 22a-133m-2. Eligible property

(a) The commissioner in consultation with the commissioner of environmental protection may acquire polluted commercial and industrial property for the purpose of remediation of the pollution. Such acquisition may include, but not be limited to, condemnation of the property in accordance with the provisions of chapter 835 of the general statutes.

(b) Such property may consist of polluted, undeveloped land zoned commercial or industrial; any developed but polluted commercial or industrial property that is abandoned or underutilized; or any developed but polluted commercial or industrial property that is underutilized provided the commissioner finds that the remediation of such property will assist with the retention or expansion of an existing manufacturing or economic base business or businesses operating on such property.

(c) Prior to the acquisition of real property by the Commissioner, the Commissioner of Environmental Protection shall conduct an assessment to evaluate the potential cost of remedial activities of any property proposed for acquisition under section 22a-133m of the General Statutes, provided that an eligible applicant has

entered into an agreement with the Commissioner in accordance with sections 22a-133m-1 to 22a-133m-3, inclusive, of these regulations.

(d) After the Commissioner of Environmental Protection performs the assessment of the property pursuant to section 22a-133m-2 (c) of these regulations, the Commissioner shall consult with the Commissioner of Environmental Protection to determine whether to initiate property acquisition. If the Commissioner finds that the estimated cost of remedial activities at the site are not significant and do not warrant participation by the State and, furthermore, that the proposed transferor of the property or the eligible applicant has the financial ability to implement the remediation activities, the Commissioner may require that the transferor or the eligible applicant fully reimburse the State for the costs of the property assessment and provide security to guarantee such repayment to the State.

(e) If, in the opinion of the Commissioner of Economic Development, the cost to assess or remediate the property, or both, represents a significant impediment to the remediation and subsequent reuse of the property for an eligible project, and provided that the Commissioner determines that the property has significant economic development and job creation potential, the Commissioner may provide financial assistance to fund the cost of assessing or remediating the property, or both. In the event that the Commissioner decides to provide financing for such costs the State shall not accept any liability under Federal law.

(f) In deciding whether to acquire any such property described in subsection (b) of this section, the Commissioner may consider any factors he deems necessary, including, but not limited to, the location of the property, the size of the polluted property and the job creation potential of the eligible project. The Commissioner shall give priority consideration to eligible projects located in a targeted investment community.

(Effective February 18, 1994)

Sec. 22a-133m-3. Transfer and reuse of remediated property

Prior to the acquisition of polluted commercial or industrial property under section 22a-133m of the Statutes, the Commissioner shall enter into an agreement with the eligible applicant. The provisions of such an agreement shall include, but not be limited to, the following:

(1) Agreement to conduct a manufacturing or economic base business at the site;

(2) Agreement to pay all necessary and appropriate legal costs incurred by the Department of Economic Development and related to this project;

(3) Agreement to execute a lease, or other legal instrument, with the State, acting through the Commissioner of Economic Development to provide for the following:

(A) Payment to the Commissioner of local property taxes related to the subject property. Such payments shall be used by the Commissioner to reimburse the municipality in which an eligible property is located for the local property taxes while such property is under the ownership of the State;

(B) Payment to the Commissioner for the costs incurred by the Department of Economic Development in administering the program;

(C) Payment to the Commissioner for the costs incurred by the Department of Environmental Protection in assessing and remediating the property;

(D) A long-term commitment by the applicant, its successors or assigns, for the term of the lease or 10 years, whichever is greater, to use the property for the specified economic development purposes;

(E) Such other terms and conditions that the Commissioner of Economic Development, in consultation with the Commissioner of Environmental Protection, may

deem necessary, including, but not limited to, the provision of collateral to secure the terms and conditions specified above.

(4) That the applicant or the property transferor will assume responsibility for any direct costs in excess of $15 million;

(5) That the applicant, its successors or assigns will assume full title to the property upon full repayment of all appropriate costs to the State;

(6) That the State shall not be liable for any and all environmental contamination which occurs after the date of completion of the site assessment conducted pursuant to section 22a-133m-2 (c) of these regulations.

(Effective February 18, 1994)

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Remediation Standard

Environmental land use restrictions 22a-133q- 1

Remediation Standard

Sec. 22a-133q-1. Environmental land use restrictions

(a) **Definitions.**

For the purpose of this section, the definitions of the terms shall be the same as the definitions of terms in section 22a-133k-1 of the Regulations of Connecticut State Agencies. In addition, the following definitions shall apply:

''Class A-2 survey'' means a first survey or independent re-survey which conforms to the ''Recommended Standards for Surveys and Maps in the State of Connecticut Adopted on September 24, 1992, effective January 1, 1993 by the Connecticut Association of Land Surveyors, Inc.'' and which has been prepared by a land surveyor licensed in the State of Connecticut; complies with the minimum detail requirements for urban land title surveys adopted by the American Land Title Association and American Congress on Surveying and Maps (such requirements shall include all optional items on Table A thereof, exclusive of Items #1 (Monumentation), #5 (Contours in Elevation), #7b-2 (Other Data), and #12; and specifically shows (1) the boundaries of the Property by course and distance, together with the metes and bounds description corresponding to such survey; (2) the location of all improvements; (3) the location and width of all easements, utility lines, rights of way and building setback lines, with references to the book and page numbers for the instruments granting the same; (4) the location of all encroachments and restrictions, if any affecting the property; (5) the location of the portion of the parcel which is the subject of the proposed environmental land use restriction and (6) the latitude and longitude of the center of the subject property.

''Environmental land use restriction'' means (1) a declaration of environmental land use restriction in the form set forth in Appendix 1 to section 22a-133q-1 of the Regulations of Connecticut State Agencies, or, in the case of an environmental land use restriction approved by a licensed environmental professional pursuant to P.A. 95-190, a declaration of environmental land use restriction in the form set forth in Appendix 2 to section 22a-133q-1 of the Regulations of Connecticut State Agencies; (2) a class A-2 survey of the subject parcel or portion thereof; (3) a certificate of title demonstrating that the subordination agreement(s) required under section 22a-133o of the General Statutes as amended by P.A. 95-190 has been recorded; and (4) a copy of the decision document prepared in accordance with subsection (f) of this section.

''Licensed environmental professional'' means an environmental professional licensed in accordance with section 4 of P.A. 95-183.

(b) **Applicability**.

This section shall govern the execution and recording of environmental land use restrictions in accordance with section 22a-133n to 22a-133s, inclusive, of the General Statutes. Except as otherwise provided by section 22a-133o of the General Statutes, no environmental land use restriction shall be effective unless and until it has (1) been submitted to the Commissioner for his review and approved by him as evidenced by his signature on the original of the instrument setting forth such restriction; and (2) been recorded on the land records in the municipality in which the subject parcel is located.

(c) **Publishing Notice of an Environmental Land Use Restriction**.

(1) The owner of the parcel which is the subject of a proposed environmental land use restriction shall, except as specified in subdivision (1) of this subsection, publish in at least one newspaper of general circulation in the area affected by the

proposed environmental land use restriction, notice of intent to record an environmental land use restriction. Such notice shall include the name and address of such owner, the address of the parcel or a brief description of its location, a brief description of the purpose of the proposed environmental land use restriction, the name and address of an individual from whom interested persons may obtain a copy of the proposed use restriction, and a statement that public comments on the proposed environmental land use restriction may be submitted in writing to the Commissioner of Environmental Protection, 79 Elm Street, Hartford, CT 06106 for thirty days after the date of publication of the notice.

(2) Notice of a proposed environmental land use restriction need not be published if (A) such restriction provides solely that the use of the subject parcel or portion thereof is restricted to industrial or commercial activities, and (B) the municipal zoning of such parcel limits the parcel to such use.

(d) **Proposing an Environmental Land Use Restriction**.

When submitting a proposed environmental land use restriction to the Commissioner for his review and approval, the owner of the affected parcel of land shall simultaneously submit:

(1) a draft declaration of environmental land use restriction in the form set forth in Appendix 1 or 2 to section 22a-133q-1 of the Regulations of Connecticut State Agencies, as applicable;

(2) a Class A-2 survey of the parcel or portion thereof which is the subject of the proposed environmental land use restriction;

(3) a proposed decision document in accordance with subsection (f) of this section; and

(4) a certified copy of the notice required by subsection (c) of this section, as such notice appeared in the newspaper or newspapers.

(e) **Approval of an Environmental Land Use Restriction by the Commissioner**.

After the close of the public comment period, the Commissioner shall decide whether to approve an environmental land use restriction. When making such decision the Commissioner shall consider: (1) all comments submitted; (2) whether such restriction will adequately protect human health and the environment from pollution at or emanating from the subject release area; and (3) whether such restriction conforms in all respects to the requirements of this section and sections 22a-133n through 22a-133s of the General Statutes.

(f) **Decision Document**.

Any environmental land use restriction approved pursuant to this section shall include a decision document prepared in accordance with this section. The decision document shall contain a detailed written description of:

(1) the type and location of pollutants present in soil or ground water on or underlying the parcel or portion thereof which is the subject of the environmental land use restriction;

(2) the provisions of the environmental land use restriction, including any limitations on the use of such parcel or portion thereof; and

(3) description of the reason for the environmental land use restriction, including an explanation why such restriction is consistent with sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies.

The decision document shall also contain a summary of all comments on the proposed environmental land use restriction received following the publication of notice in accordance with subsection (c) of this section and a brief response to each comment. The decision document shall be signed by the Commissioner or, in the

case of a restriction approved pursuant to P.A. 95-190, a licensed environmental professional to indicate approval of the decision document.

(g) **Approval of an Environmental Land Use Restriction by a Licensed Environmental Professional**.

When an environmental land use restriction is to be approved by a licensed environmental professional in accordance with P.A. 95-190, the licensed environmental professional shall review the documents listed in subsection (e), shall prepare a written approval of such restriction, and shall retain documentation of all documents reviewed by him. A licensed environmental professional shall not approve any environmental land use restriction unless it is consistent with sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies.

(h) **Subordination Agreements**.

Whether the Commissioner or a licensed environmental professional approves an environmental land use restriction, prior to recording such environmental land use restriction on the municipal land records, the owner of the subject parcel shall submit to the Commissioner for his review and written approval: (1) copies of each subordination agreement, properly executed, required under section 22a-133o of the General Statutes; or (2) a certificate of title indicating that each person holding an interest in such parcel or any part thereof, including without limitation each mortgagee, lessee, lienor and encumbrancer, has irrevocably subordinated such interest to the environmental land use restriction.

(i) **Recording an Environmental Land Use Restriction**.

After the Commissioner or a licensed environmental professional, as applicable, has approved an environmental land use restriction in accordance with this section, the owner of the subject parcel shall record such restriction in accordance with this section and all other applicable law.

(j) **Mailing Notice of an Environmental Land Use Restriction**.

After an environmental land use restriction has been recorded, the owner of the subject parcel shall send, by certified mail, return receipt requested, a copy of such environmental land use restriction to (1) the chief administrative officer in the town where the parcel is located; (2) the chairman of the municipal planning, zoning or planning and zoning commission; (3) the local director of health; and (4) any person who submitted comments on such environmental use restriction.

(k) **Release**.

The owner of any parcel which is subject to an environmental land use restriction recorded in accordance with this section may request that the Commissioner release such parcel, in whole or in part, from the limitations of such restriction. If the Commissioner grants such request, the owner of such parcel shall, in accordance with law, record such release on the land records in the municipality where such parcel is located. No release of an environmental land use restriction shall be effective unless and until it has been submitted to the Commissioner for his review and approved by him as evidenced by his signature on the original of the instrument setting forth such release, and has been recorded on the land records of the municipality in which such parcel is located.

(*l*) **Effect of Court Ruling on Environmental Land Use Restriction**.

In the event that a court of competent jurisdiction rules that any portion of an environmental land use restriction recorded pursuant to this section is invalid, the owner of the subject parcel shall submit a copy of such restriction and such ruling to the Commissioner. The Commissioner shall review such restriction, and if he determines that such restriction would not have been approved without the invalid

portion, he shall give notice that the environmental land use restriction is terminated as evidenced by his signature on in instrument setting forth such termination, and shall record such instrument on the land records of the municipality where such parcel is located. Promptly thereafter, the owner of the subject parcel shall take actions consistent with sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies to remediate the subject parcel or portion thereof. If the Commissioner determines in writing that the environmental land use restriction would have been approved without the invalid portion, the valid portion of the environmental land use restriction shall remain in full force and effect.

Appendix 1 to
Section 22a-133q-1 of the Regulations of Connecticut State Agencies
Form of Environmental Land Use Restriction for Commissioners Approval

Instructions: Any environmental land use restriction pursuant to R.C.S.A. section 22a-133q-1 shall be in the following form. The appropriate information shall be inserted in the blanks shown, and the appropriate language shall be selected from the choices shown in brackets, or if none of the choices addresses the specific circumstance, substitute language shall be inserted.

DECLARATION OF ENVIRONMENTAL LAND USE RESTRICTION
AND GRANT OF EASEMENT

This Declaration of environmental land use restriction and Grant of Easement is made this day of , 1995 , between (''the Grantor'') and the Commissioner of Environmental Protection of the State of Connecticut (''the Grantee'').

W I T N E S S E T H:

WHEREAS, Grantor is the owner in fee simple of certain real property (the ''Property'') known as [Address/Location located in the Town of in County] [designated as Lot , Block on the tax map of the Town of in County], more particularly described on Exhibit A which is attached hereto and made a part hereof; and

WHEREAS, the Grantee has determined that the environmental land use restriction set forth below is consistent with regulations adopted by him pursuant to Section 22a-133k of the Connecticut General Statutes; and

WHEREAS, the Grantee has determined that this environmental land use restriction will effectively protect public health and the environment from the hazards of pollution; and

WHEREAS, the Grantee's written approval of this Environmental land use restriction is contained in the document attached hereto as Exhibit B (the ''Decision Document'') which is made a part hereof; and

WHEREAS, the property or portion thereof identified in the class A-2 survey (''the Subject Area'') which survey is attached hereto as Exhibit C which is made a part hereof, contains pollutants and

WHEREAS, to prevent exposure to or migration of such pollutants and to abate hazards to human health and the environment, and in accordance with the Decision Document, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the Subject Area, and to grant this environmental land use restriction to the Grantee on the terms and conditions set forth below; and

WHEREAS, Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against Grantor and Grantors successors and assigns;

NOW, THEREFORE, Grantor agrees as follows:

1. Purpose. In accordance with the Decision Document, the purpose of this Environmental land use restriction is to assure [that the Subject Area is not used for residential activities], [that ground water at the Subject Area is not utilized for drinking purposes], [that humans are not exposed to soils at the Subject Area polluted with substances in concentrations exceeding the direct exposure criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive], [that water does not infiltrate soils at the Subject Area polluted with substances in concentrations exceeding the pollutant mobility criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive] [that buildings are not constructed over soils or ground water at the Subject Area polluted with substances in concentrations exceeding the volatilization criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive], [that the engineered control described in Exhibit D attached hereto is not disturbed and is properly maintained to prevent human exposure to soils at the Subject Area polluted with substances in concentrations exceeding the direct exposure criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive, and/or that water does not infiltrate soils at the Subject Area polluted with substances in concentrations exceeding the pollutant mobility criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive.]

2. Restrictions Applicable to the Subject Area: In furtherance of the purposes of this environmental land use restriction, Grantor shall assure that use, occupancy, and activity of and at the Subject Area are restricted as follows:

[A. Use. No residential use of the Subject Area shall be permitted.

B. Ground water. Ground water at the Subject Area shall not be used for drinking or other domestic purposes.

C. Disturbances. Soil at the Subject Area shall not be disturbed in any manner, including without limitation,

D. Construction. No building shall be constructed on the Subject Area.]

3. Except as provided in Paragraph 4 below, no action shall be taken, allowed, suffered, or omitted if such action or omission is reasonably likely to:

i. Create a risk of migration of pollutants or a potential hazard to human health or the environment; or

ii. Result in a disturbance of the structural integrity of any engineering controls designed or utilized at the Property to contain pollutants or limit human exposure to pollutants.

4. Emergencies. In the event of an emergency which presents a significant risk to human health or the environment, the application of Paragraph 3 above may be

suspended, provided such risk cannot be abated without suspending such Paragraph and the Grantor:

i. Immediately notifies the Grantee of the emergency;

ii. Limits both the extent and duration of the suspension to the minimum reasonably necessary to adequately respond to the emergency;

iii. Implements all measures necessary to limit actual and potential present and future risk to human health and the environment resulting from such suspension; and

iv. Implements a plan approved in writing by the Grantee, on a schedule approved by the Grantee, to ensure that the Subject Area is remediated in accordance with R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive, or restored to its condition prior to such emergency.

5. Release of Restriction; Alterations of Subject Area. Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of any of the Subject Area inconsistent with this Environmental land use restriction unless the Grantor has first recorded the Grantees written approval of such alteration upon the land records of [name of municipality where Subject Area is located]. The Grantee shall not approve any such alteration and shall not release the Property from the provisions of this environmental land use restriction unless the Grantor demonstrates to the Grantees satisfaction that Grantor has remediated the Subject Area in accordance with R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive.

6. Grant of Easement to the Grantee. Grantor hereby grants and conveys to the Grantee, his agents, contractors, and employees, and to any person performing pollution remediation activities under the direction thereof, a non-exclusive easement (the ''Easement'') over the Subject Area and over such other parts of the Property as are necessary for access to the Subject Area or for carrying out any actions to abate a threat to human health or the environment associated with the Subject Area. Pursuant to this Easement, the Grantee, his agents, contractors, and employees, and any person performing pollution remediation activities under the direction thereof, may enter upon and inspect the Property and perform such investigations and actions as the Grantee deems necessary for any one or more of the following purposes:

i. Ensuring that use, occupancy, and activities of and at the Property are consistent with this environmental land use restriction;

ii. Ensuring that any remediation implemented complies with R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive;

iii. Performing any additional investigations or remediation necessary to protect human health and the environment;

[iv. Ensuring the structural integrity of any engineering controls described in this Environmental land use restriction and Grant of Easement and their continuing effectiveness in containing pollutants and limiting human exposure to pollutants.]

7. Notice and Time of Entry onto Property. Entry onto the Property by the Grantee pursuant to this Easement shall be upon reasonable notice and at reasonable times, provided that entry shall not be subject to these limitations if the Grantee determines that immediate entry is necessary to protect human health or the environment.

8. Notice to Lessees and Other Holders of Interests in the Property. Grantor, or any future holder of any interest in the property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or transferee to comply with this environmental land use restriction and Grant of Easement. The failure to include such provision shall not affect

the validity or applicability to the Property of this environmental land use restriction and Grant of Easement.

9. Persons Entitled to Enforce Restrictions. The restrictions in this environmental land use restriction on use, occupancy, and activity of and at the Property shall be enforceable in accordance with section 22a-133p of the General Statutes.

10. Severability and Termination. If any court of competent jurisdiction determines that any provision of this environmental land use restriction or Grant of Easement is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court. In the event that the provision invalidated is of such nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the remaining provisions of this instrument shall remain in full force and effect. Further, in either case, the Grantor shall submit a copy of this restriction and of the judgement of the Court to the Grantee in accordance with R.C.S.A. section 22a-133q-1(1). This environmental land use restriction shall be terminated if the Grantee provides notification pursuant to R.C.S.A. section 22a-133q-1(l).

11. Binding Effect. All of the terms, covenants and conditions of this environmental land use restriction and grant of easement shall run with the land and shall be binding on the Grantor, the Grantor's successors and assigns, and each owner and any other party entitled to possession or use of the Property during such period of ownership or possession.

12. Terms Used Herein. The definitions of terms used herein shall be the same as the definitions contained in sections 22a-133k-1 and 22a-133o-1 of the Regulations of Connecticut State Agencies as such sections existed on the date of execution of this environmental land use restriction.

Appendix 2 to
Section 22a-133q-1 of the Regulations of Connecticut State Agencies
Form of Environmental Land Use Restriction for Licensed Environmental Professional's Approval

Instructions: Any environmental land use restriction pursuant to R.C.S.A. section 22a-133q-1 shall be in the following form. The appropriate information shall be inserted in the blanks shown, and the appropriate language shall be selected from the choices shown in brackets, or if none of the choices addresses the specific circumstance, substitute language shall be inserted.

DECLARATION OF ENVIRONMENTAL LAND USE RESTRICTION AND GRANT OF EASEMENT

This Declaration of environmental land use restriction and Grant of Easement is made this day of , 1995 , between (''the Grantor'') and the Commissioner of Environmental Protection of the State of Connecticut (''the Grantee'').

W I T N E S S E T H:

WHEREAS, Grantor is the owner in fee simple of certain real property (the ''Property'') known as [Address/Location located in the Town of in County] [designated as Lot , Block on the tax map of the Town of in County], more particularly described on Exhibit A which is attached hereto and made a part hereof; and

WHEREAS, remediation of the Property has been conducted in accordance with Public Act 95-190; and

WHEREAS, the Licensed Environmental Professional whose signature appears below has determined that the environmental land use restriction set forth below is consistent with regulations adopted by the Commissioner of Environmental Protection pursuant to Section 22a-133k of the Connecticut General Statutes; and

WHEREAS, the Licensed Environmental Professional whose signature appears below has determined that this environmental land use restriction will effectively protect public health and the environment from the hazards of pollution; and

WHEREAS, the written approval of this Environmental land use restriction by the Licensed Environmental Professional whose signature appears below is contained in the document attached hereto as Exhibit B (the ''Decision Document'') which is made a part hereof; and

WHEREAS, the property or portion thereof identified in the class A-2 survey (''the Subject Area'') which survey is attached hereto as Exhibit C which is made a part hereof, contains pollutants; and

WHEREAS, to prevent exposure to or migration of such pollutants and to abate hazards to human health and the environment, and in accordance with the Decision Document, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the Subject Area, and to grant this environmental land use restriction to the Grantee on the terms and conditions set forth below; and

WHEREAS, Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against Grantor and Grantors successors and assigns;

NOW, THEREFORE, Grantor agrees as follows:

1. Purpose. In accordance with the Decision Document, the purpose of this Environmental land use restriction is to assure [that the Subject Area is not used for residential activities], [that ground water at the Subject Area is not utilized for drinking purposes], [that humans are not exposed to soils at the Subject Area polluted with substances in concentrations exceeding the direct exposure criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive], [that water does not infiltrate soils at the Subject Area polluted with substances in concentrations exceeding the pollutant mobility criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive] [that buildings are not constructed over soils or ground water at the Subject Area polluted with substances in concentrations exceeding the volatilization criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive], [that the engineered control described in Exhibit D attached hereto is not disturbed and is properly maintained to prevent human exposure to soils at the Subject Area polluted with substances in concentrations exceeding the direct exposure criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive, and/or that water does not infiltrate soils at the Subject Area polluted with substances in concentrations exceeding the pollutant mobility criteria established in R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive].

2. Restrictions Applicable to the Subject Area: In furtherance of the purposes of this environmental land use restriction, Grantor shall assure that use, occupancy, and activity of and at the Subject Area are restricted as follows:

[A. Use. No residential use of the Subject Area shall be permitted.

B. Ground water. Ground water at the Subject Area shall not be used for drinking or other domestic purposes.

C. Disturbances. Soil at the Subject Area shall not be disturbed in any manner, including without limitation,

D. Construction. No building shall be constructed on the Subject Area.]

3. Except as provided in Paragraph 4 below, no action shall be taken, allowed, suffered, or omitted if such action or omission is reasonably likely to:

i. Cause migration of pollutants or create a potential hazard to human health or the environment; or

ii. Result in a disturbance of the structural integrity of any engineering controls or other structures designed or utilized at the Property to contain pollutants or limit human exposure to pollutants.

4. Emergencies. In the event of an emergency which presents a significant risk to human health or the environment, the application of Paragraph 3 above may be suspended, provided such risk cannot be abated without suspending such Paragraph <u>and</u> the Grantor:

i. Immediately notifies the Grantee of the emergency;

ii. Limits both the extent and duration of the suspension to the minimum reasonably necessary to adequately respond to the emergency;

iii. Implements all measures necessary to limit actual and potential present and future risk to human health and the environment resulting from such suspension; and

iv. Implements a plan approved in writing by the Grantee, on a schedule approved by the Grantee, to ensure that the Subject Area is remediated in accordance with R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive, or restored to its condition prior to such emergency.

5. Release of Restriction; Alterations of Subject Area. Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of any of the Subject Area inconsistent with this Environmental land use restriction unless the Grantor has first recorded the Grantee's written approval of such alteration upon the land records of [name of municipality where Subject Area is located]. The Grantee shall not approve any such alteration and shall not release the Property from the provisions of this environmental land use restriction unless the Grantor demonstrates to the Grantees satisfaction that Grantor has remediated the Subject Area in accordance with R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive.

6. Grant of Easement to the Grantee. Grantor hereby grants and conveys to the Grantee, his agents, contractors, and employees, and to any person performing pollution remediation activities under the direction thereof, a non-exclusive easement (the ''Easement'') over the Subject Area and over such other parts of the Property as are necessary for access to the Subject Area or for carrying out any actions to abate a threat to human health or the environment associated with the Subject Area. Pursuant to this Easement, the Grantee, his agents, contractors, and employees, and any person performing pollution remediation activities under the direction thereof, may enter upon and inspect the Property and perform such investigations and actions as the Grantee deems necessary for any one or more of the following purposes:

I. Ensuring that use, occupancy, and activities of and at the Property are consistent with this environmental land use restriction;

ii. Ensuring that any remediation implemented complies with R.C.S.A. sections 22a-133k-1 through 22a-133k-3, inclusive;

iii. Performing any additional investigations or remediation necessary to protect human health and the environment;

[iv. Ensuring the structural integrity of any engineering controls described in this Environmental land use restriction and Grant of Easement and their continuing effectiveness in containing pollutants and limiting human exposure to pollutants.]

7. Notice and Time of Entry onto Property. Entry onto the Property by the Grantee pursuant to this Easement shall be upon reasonable notice and at reasonable times, provided that entry shall not be subject to these limitations if the Grantee determines that immediate entry is necessary to protect human health or the environment.

8. Notice to Lessees and Other Holders of Interests in the Property. Grantor, or any future holder of any interest in the property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or transferee to comply with this environmental land use restriction and Grant of Easement. The failure to include such provision shall not affect the validity or applicability to the Property of this environmental land use restriction and Grant of Easement.

9. Persons Entitled to Enforce Restrictions. The restrictions in this environmental land use restriction on use, occupancy, and activity of and at the Property shall be enforceable in accordance with section 22a-133p of the General Statutes.

10. Severability and Termination. If any court of competent jurisdiction determines that any provision of this environmental land use restriction or Grant of Easement is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court. In the event that the provision invalidated is of such nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the remaining provisions of this instrument shall remain in full force and effect. Further, in either case, the Grantor shall submit a copy of this restriction and of the judgement of the Court to the Grantee in accordance with R.C.S.A. section 22a-133q-1(1). This environmental land use restriction shall be terminated if the Grantee provides notification pursuant to R.C.S.A. section 22a-133q-1(*l*).

11. Binding Effect. All of the terms, covenants and conditions of this environmental land use restriction and grant of easement shall run with the land and shall be binding on the Grantor, the Grantor's successors and assigns, and each owner and any other party entitled to possession or use of the Property during such period of ownership or possession.

12. Terms Used Herein. The definitions of terms used herein shall be the same as the definitions contained in sections 22a-133k-1 and 22a-133o-1 of the Regulations of Connecticut State Agencies as such sections existed on the date of execution of this environmental land use restriction.

(Effective January 30, 1996)

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State Board of Examiners of Environmental Professionals

Sec. 22a-133v-1. Definitions

For the purposes of section 22a-133v-1 through 22a-133v-8, inclusive, of the Regulations of Connecticut State Agencies:

(a) ''Accredited college or university'' means a college or university which is fully accredited by a nationally recognized regional accrediting association.

(b) ''Applicant'' means an individual who submits an application to the Board.

(c) ''Application'' means an application for a license or for renewal of a license or for reinstatement of a license which was revoked.

(d) ''Board'' means the State Board of Examiners of Environmental Professionals established pursuant to section 22a-133v of the Connecticut General Statutes.

(e) ''Client'' means any person, other than an employer, who retains a licensed environmental professional to provide professional services.

(f) ''College or advanced degree level course'' means a course offered by an accredited college or university, provided that such course may be taken for a grade and the course meets on a regular weekly schedule on a semester, trimester or quarterly basis.

(g) ''Commissioner'' means the Commissioner of Energy and Environmental Protection or his designated agent.

(h) ''Contingent fee arrangement'' means any arrangement whereby the payment or non-payment of a fee or compensation of any kind, in whole or in part, is paid or provided to a licensed environmental professional dependent upon a specified finding or the outcome of a matter.

(i) ''Day'' means a calendar day.

(j) ''Department'' means the Department of Energy and Environmental Protection.

(k) ''Employee'' means an individual who is a full or part-time staff member on the payroll of an employer.

(*l*) ''Examination'' means a licensing test administered by the State Board of Examiners of Environmental Professionals.

(m) ''Hazardous waste'' means hazardous waste as defined in section 22a-134 of the Connecticut General Statutes.

(n) ''Individual'' means a natural person.

(o) ''License'' means a license issued by the Commissioner under section 22a-133v of the Connecticut General Statutes to provide services as a licensed environmental professional.

(p) ''Licensed environmental professional'' or ''licensee'' means an environmental professional who is licensed pursuant to section 22a-133v of the Connecticut General Statutes.

(q) ''Parcel'' means a piece, tract or lot of land, together with the buildings and other improvements situated thereon, a legal description of which piece, parcel, tract or lot is contained in a deed or other instrument of conveyance.

(r) ''Person'' means a person as defined in section 22a-423 of the Connecticut General Statutes.

(s) ''Individual placed on a list of environmental professionals'' means an individual placed on a list of environmental professionals by the Commissioner as provided for in section 22a-133v of the Connecticut General Statutes.

(t) ''Petroleum'' means petroleum as defined in section 22a-449a of the Connecticut General Statutes.

(u) ''Pollution'' means pollution as defined in section 22a-423 of the Connecticut General Statutes.

(v) ''Professional services'' means the providing of environmental services including, but not limited to, services relating to the investigation or remediation of the release of hazardous waste or petroleum products into soil or groundwater, preparing studies or reports regarding any such investigation or remediation, or rendering of a verification or the production of other documents pertaining to any verification by a licensed environmental professional.

(w) ''Remediate'' means remediate as defined in section 22a-134 of the Connecticut General Statutes.

(x) ''Remediation standards'' means sections 22a-133k-1 through 22a-133k-3, inclusive, and section 22a-133q-1 of the Regulations of Connecticut State Agencies.

(y) ''Technical advisor'' means a provider of technical advice or assistance to the independent testing service that is developing or has developed the Board's licensing examination.

(z) ''Verification'' means verification as defined in section 22a-134 of the Connecticut General Statutes or any written opinion which a licensed environmental professional is authorized by law to render (i) regarding an investigation, remediation, environmental land use restriction or (ii) pursuant to sections 22a-133o, 22a-133x, 22a-133y, and 22a-134a of the Connecticut General Statutes, sections 22a-133k-1 through 22a-133k-3, inclusive, and 22a-133q-1 of the Regulations of Connecticut State Agencies, or any other law, regulation, order, permit, license or approval.

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-2. Requirements for licensure

(a) **Required Information**

Each applicant shall, through the submission of complete and accurate information to the Board, demonstrate that such applicant meets the qualifications for licensure.

(b) **Education and Experience Requirements**

(1) No license shall be issued to an applicant unless such applicant demonstrates to the satisfaction of the Board that such applicant has (A) for a minimum of eight years engaged in the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater, including a minimum of four years in responsible charge of such investigation and remediation, and holds a bachelor's or advanced degree from an accredited college or university in a science or engineering field specified by subparagraph (2)(A) of this subsection, or in a related science or engineering field found by the Board to be fundamentally equivalent to one or more thereof, or is a professional engineer licensed in accordance with Chapter 391 of the Connecticut General Statutes, or (B) for a minimum of fourteen years engaged in the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater, including a minimum of seven years in responsible charge of such investigation and remediation.

(2) For purposes of subdivision (1) of this subsection the following shall apply:

(A) A bachelor's or advanced degree from an accredited college or university shall be in one or more of the following fields or in a related science or engineering field found by the Board to be fundamentally equivalent to one of the following: biology, chemistry, earth sciences, ecology, engineering (civil, environmental, mechanical, chemical, or agricultural), environmental sciences, environmental studies, geology, hydrogeology, hydrology, natural resources management, soil sciences, toxicology, water resources, and wetland science.

Upon the written request from an applicant, the Board shall determine whether an applicant's degree, or undergraduate, graduate or postgraduate education is fundamentally equivalent to a degree listed in the paragraph above. Such request shall identify the bachelor's or advanced degree issued to the applicant, the accredited college or university which issued such degree, courses that the applicant took and any other information that the Board may request. The Board may consider all such applicant's course work, including but not limited to, undergraduate, graduate or postgraduate course work when making such determination.

(B) Except as is provided in this subparagraph, experience that an applicant obtains when such applicant is enrolled as a full-time undergraduate or graduate student at an accredited college or university shall not be counted toward satisfaction of the experience requirement of subdivision (1) of this subsection provided that upon written request, the Board may count toward satisfaction of such requirements full-time work performed by an applicant for at least three consecutive months during any time when such applicant was enrolled as a full-time student in an accredited graduate degree program.

(C) Engaged-in experience shall be professional experience for which the Board determines that an applicant's primary duties have consistently involved both the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater. The Board shall consider the following in determining whether an applicant's professional experience qualifies as engaged-in experience: the description of work activities; the diversity of work and types of activities performed; the field or fields of activities performed; the duration of employment; the reports, studies or documents prepared; and any other factors the Board deems relevant.

Engaged-in experience does not include experience primarily involving or associated with:

(i) non-scientific or non-technical activities regarding the investigation or remediation of releases of hazardous waste or petroleum products into soil or groundwater, including but not limited to, activities such as contract management, budget control, legal analysis, regulatory compliance audits, or other similar activities; and

(ii) landfill design and management, except for closure of a hazardous waste landfill; septic systems or similar non-hazardous material disposal facilities; water supply systems; waste water treatment systems; complying with hazardous waste requirements; activities generally subcontracted, such as drilling, geophysical surveying, surveying, geotechnical analysis, laboratory analysis and risk assessment or similar activities.

(D) Responsible charge experience shall be professional experience for which the Board determines that an applicant's primary duties consistently involve a high level of responsibility and decision making regarding both the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater. The Board shall consider the following in determining whether an applicant's professional experience qualifies as responsible charge experience:

(i) the level of independent decision making exercised by the applicant;

(ii) the number of individuals and the disciplines of the other professionals that the applicant supervised or coordinated;

(iii) the extent to which an applicant's responsibilities consistently involved both the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater and whether such responsibilities were an integral and substantial component of the applicant's position;

(iv) the nature of an applicant's employer's primary business interests and the relation of those interests to conducting investigations and remediation of releases of hazardous waste or petroleum products into soil or groundwater;

(v) the extent to which an applicant has engaged in the evaluation and selection of scientific or technical methodologies for conducting investigations and remediation of releases of hazardous waste or petroleum products into soil or groundwater;

(vi) the extent to which an applicant drew technical conclusions, made recommendations, and issued opinions based on the results of investigations and remediation of releases of hazardous waste or petroleum products into soil or groundwater; or

(vii) any other factor that the Board deems relevant.

(c) **Passing Grade on an Examination**

No license shall be issued to an applicant unless such applicant achieves a passing score on the environmental professional licensing examination administered by the Board under section 22a-133v-3 of the Regulations of Connecticut State Agencies.

(d) **Good Moral Character**

No license shall be issued to an applicant unless such applicant demonstrates to the satisfaction of the Board that such applicant possesses good moral character. Evidence of a lack of such character may include conviction in any jurisdiction of a felonious act, the submission of false or incomplete information on any application, acts involving dishonesty, fraud or deceit which have substantial connection to the professional responsibilities of a licensed environmental professional, or engaging in professional misconduct of the type proscribed in section 22a-133v(g) of the Connecticut General Statutes or section 22a-133v-4(b)(3) of the Regulations of Connecticut State Agencies.

(e) **Continuing Education Requirements**

(1) Basic Requirements

(A) Every odd numbered calendar year following the issuance of a license to a licensee, such licensee shall demonstrate in writing on a form prescribed by the Board, that such licensee has earned a minimum of 24 continuing education credits during the previous two years, or a minimum of 12 continuing education credits if the elapsed time since issuance of the license has been one year. For the purposes of this subsection, continuing education consists of successful completion of courses or seminars devoted to the subjects set forth in subdivision (2) of this subsection, provided such courses or seminars are reasonably likely to maintain or enhance a licensee's competence. Health and safety training courses required pursuant to the Occupational Safety and Health Act (29 U.S.C. § 651 et seq.) shall not be deemed continuing education.

Except as provided in section 22a-133v-4(e) of the Regulations of Connecticut State Agencies, no licensee may apply continuing education credits earned during one biennial license period toward the continuing education requirements of another biennial license period.

(B) The continuing education credits required by this subsection shall be calculated as follows:

(i) one continuing education credit for each contact hour of a seminar that a licensee attends;

(ii) one continuing education credit for each semester hour of a college or advanced degree level course that a licensee audits at an accredited college or university;

(iii) two continuing education credits for each semester hour of a college or advanced degree level course that a licensee takes for a pass/fail at an accredited college or university provided the licensee passes such course;

(iv) four continuing education credits for each semester hour of a college or advanced degree level course that a licensee takes for a grade at an accredited college or university provided the licensee passes such course with a grade of C or its equivalent or better.

For purposes of this subparagraph and subdivision (3)(A) of this subsection, a ''contact hour'' means an hour that a licensee spends attending an instructional seminar, exclusive of registration, meals, administrative activities or social functions.

(C) Upon the request of the Board or the Commissioner, a licensee shall provide:

(i) attendance records demonstrating the licensee's compliance with the attendance requirements of this subsection;

(ii) documentation that a course or seminar was taught by a competent instructor knowledgeable in the subject matter presented;

(iii) a written outline or syllabus, prepared by the instructor, of the course or seminar;

(iv) any other information regarding a course or seminar which the Board or the Commissioner requests.

(2) Credit Minimums/Maximums

The continuing education credits required by subparagraph (1)(A) of this subsection shall include credits from courses or seminars on technical subjects or regulatory subjects which will enhance the licensee's ability to competently perform, supervise and/or coordinate the scientific and/or technical components of the investigation and remediation of releases of petroleum products and hazardous waste into soil or groundwater in Connecticut. For the purposes of this subsection, a licensee may earn up to, but no more than, 12 continuing education credits by taking or auditing a college or advanced degree level course during any biennial period.

(3) Attendance Requirements

(A) To satisfy the continuing education requirements of this subsection, a licensee shall attend at least 90% of the contact hours of an applicable course or seminar.

(B) Once a licensee has received continuing education credit under this subsection for a course or seminar, such licensee may retake such course or seminar for credit provided that at least two (2) biennial periods have passed since the licensee took such course or seminar.

(4) General Course Requirements

Attendance of a course or seminar shall not be deemed to meet the continuing education requirements of this subsection unless:

(A) attendance records for such course or seminar are maintained by the provider of such course or seminar;

(B) the licensee attends at least 2 (two) consecutive hours of instruction if the course or seminar is not a college or advanced degree level course;

(C) such course or seminar is taught by a competent instructor knowledgeable in the subject matter presented;

(D) the instructor follows a written outline or syllabus of such course or seminar; and

(E) such course or seminar is completed.

(5) Required Courses

Upon written notice from the Commissioner or the Board, a licensee shall complete or attend a specific course or seminar within the time period identified in such notice. Such course or seminar shall be counted toward fulfilling the continuing education requirements of this subsection.

(6) Course/Seminar Approval/Disapproval

(A) The Board may, upon written request from a licensee, course provider, or other person, determine that a specific course or seminar meets the continuing education requirements of this subsection. A request to the Board under this subdivision shall be made on a form prescribed by the Board and shall provide at least: a written outline or syllabus of such course or seminar; a detailed description of such course or seminar; a copy of any instructional materials used; the length of the course or seminar; and the names and qualifications of the course or seminar instructor. Upon receipt of all the information it deems necessary to make a decision, the Board shall determine whether such course or seminar meets the continuing education requirements of this subsection and shall provide written notice of that determination to the person who requested it. A request under this subdivision may be submitted to the Board either before or after a course or seminar has been given or taken.

(B) If the Board determines that a course or seminar does not meet the continuing education requirements of this subsection, the Board shall deny a licensee all or a portion of the continuing education credits sought and may take any other appropriate action including, but not limited to, requiring that such licensee obtain additional continuing education credits in a subsequent continuing education requirement license renewal period, or a shorter term as the Board deems appropriate.

(7) Alternative Means to Obtain Continuing Education Credits

The Board may, upon written request from a licensee, determine that such licensee may receive up to, but no more than, 12 continuing education requirements, in any biennial period, for activities such as teaching a course or seminar. A request under this subdivision shall be in writing and shall include at least: a detailed description of the activities for which continuing education is sought, a copy of any instructional materials involved; the length of the activity; and the names and qualifications of persons involved. The Board may request any additional information it deems necessary regarding such activities. The Board shall determine whether such activities meet the continuing education requirements of this subsection and the Board shall provide written notice of its determination to the person who requested it. A request under this subdivision may be made either before or after such licensee has engaged in such activities.

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-3. Application and examination procedure

(a) **Form and Filing of Applications**

(1) Every application shall be filed with the Board. Said application shall be in writing on a current form prescribed by the Board. The applicant shall completely and accurately provide the information required on such application.

(2) An applicant may not be considered for admittance to the next scheduled examination unless at least 90 days before the date of such examination such applicant files with the Board a complete application. An application which is incomplete, illegible or not completed according to the instructions, or which fails to meet any other applicable requirement, shall be rejected by the Board. At any time during its review of an application, the Board may require the applicant to submit references and other information related to the applicant's moral character, employment history, education, experience, and any other matters reasonably deemed relevant by the Board.

(3) An application is not complete unless accompanied by a $235.00 examination fee. Such fee shall be paid by check or money order payable to the Department of Energy and Environmental Protection. This fee is non-refundable.

(4) Each application, including but not limited to any attachments thereto, shall be certified by the applicant who shall state in writing: ''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based upon a reasonable investigation, the submitted information is true and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes or any other applicable statute.''

(5) Each application, and such copies thereof as the Board may require, shall be deemed filed with the Board on the date such application is received by the Board.

(6) Required Education/Engineering Information

Each applicant shall cause to be filed with the Board, a verification of education to demonstrate that such applicant has the minimum education requirements for licensure or a notarized verification of current licensure in Connecticut as a professional engineer in accordance with Chapter 391 of the General Statues. Any such verification of education shall be on a form prescribed by the Board and shall be completed, certified and submitted by the educational institution(s) which issued a degree to the applicant.

(7) Review of Applications

Upon determining that an applicant is eligible for examination, the Board shall notify such applicant of the date, time, and place of the examination, the materials that may be brought into the examination and any other necessary information. Upon finding that an applicant is ineligible for examination, the Board shall so notify such applicant at least 30 days before the next scheduled examination date. An applicant determined by the Board to be ineligible for examination may reapply in accordance with the procedures set forth in subsection (a) of this section.

(8) Interviews

The Board may, in its discretion, require an applicant to appear for a personal interview regarding such applicant's application. If an applicant fails to appear for a personal interview scheduled with the Board, such applicant shall be deemed ineligible for the next scheduled examination unless the Board determines that such failure to appear was due to circumstances reasonably beyond the applicant's control.

(b) **Examination**

(1) Frequency and Scheduling

The Board shall establish the date, place, and time of each examination.

(2) Examination Procedures and Rules

(A) Each applicant shall be required to present at the examination:

(i) a current motor vehicle operator's license or other government-issued form of identification that contains a photograph of the applicant;

(ii) a passport; or

(iii) any other form of official identification that has been approved in advance by the Board.

(B) Applicants shall not be allowed to bring any books, notes, memoranda, scratch paper, calculators, computers, or other equipment or any other materials into the examination room unless the Board has given prior written authorization to do so.

(C) The following rules shall govern administration of the examination. Violation of any rule by an applicant shall be considered grounds for denial of a license to such applicant and may be considered grounds for disqualification of such applicant from a subsequent examination or all subsequent examinations. The following rules are not intended to be exclusive; prior to the giving of each examination, the Board

may establish other rules or procedures as it deems reasonable or necessary regarding the administration of the examination.

(i) An applicant shall not at any time copy an examination question or make notes relative thereto, or engage in any activity that could or would otherwise compromise the integrity of the examination.

(ii) During the examination, an applicant shall not discuss the examination with anyone other than a proctor.

(iii) An applicant shall not read or copy an answer of any other applicant and shall not knowingly permit any of his answers to be read or copied by any other applicant.

(iv) An applicant shall not leave the examination room at any time with anything except such items as such applicant brought into the examination room. Any note, scratch paper, or calculation made or used by an applicant during the examination shall be turned in to a proctor along with the applicant's examination and answer sheet prior to leaving the examination room.

(3) Passing Score

The Board shall establish the passing score for each environmental professional licensing examination using accepted psychometric procedures and based upon its determination of the score that should be obtained by an individual who has the requisite level of overall technical and regulatory knowledge that the Board deems reasonably necessary to carry out the responsibilities of a licensed environmental professional. The passing score established by the Board may vary from examination to examination.

(4) Examination Results

The Board shall mail the results of the examination to each individual who took it.

(5) Reapplication for Examination

An applicant who fails to achieve a passing score on the examination may take a subsequent examination if no less than 60 days before such examination, he files with the Board:

(A) A form prescribed by the Commissioner stating such applicant's intention to take the next scheduled examination;

(B) Payment of the $235.00 examination fee; and

(C) (i) Certification, on a form prescribed by the Commissioner, stating that the information in the applicant's most recent application remains current and accurate, or (ii) information regarding any changes to the information in the applicant's most recent application, together with the certification set forth in subdivision (a)(4) of this section.

(c) **Individuals Assisting With Examination Development**

Any technical advisor or Board member participating in developing the examination may not take such examination within 2 years of participating in exam development.

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-4. Licensing and delicensing procedures

(a) **Issuance of License**

(1) The Board shall authorize the Commissioner to issue a license, with or without appropriate conditions, to each applicant who achieves a passing score on an examination and who otherwise in the Board's judgement satisfies the requirements of Section 22a-133v-2 of the Regulations of Connecticut State Agencies.

(2) Each license shall be effective on the date of issuance by the Commissioner and shall expire on July 1 following the date of issuance.

(b) **Suspension, Revocation, Sanction or Denial of a License**

(1) In addition to any other reason provided by law, including the reasons set out in section 22a-3a-5(d)(2) of the Regulations of Connecticut State Agencies, the Board may deny an application for failure to meet any of the requirements of section 22a-133v-2 of the Regulations of Connecticut State Agencies, or for any reason specified in section 22a-133v(g) of the Connecticut General Statutes, and may authorize the Commissioner to suspend or revoke a license, or impose any other sanctions that the Board deems appropriate for any reason specified in section 22a-133v-1 through 22a-133v-8, inclusive, of the Regulations of Connecticut State Agencies or section 22a-133v of the Connecticut General Statutes. All hearings regarding the denial of an application for licensure, the suspension or revocation of a license, or any sanction of a licensee shall be conducted in accordance with section 22a-133v-7 of the Regulations of Connecticut State Agencies.

(2) Any person may file a written complaint with the Board concerning the conduct of any applicant or licensee, and the Board may investigate such complaint.

(3) For the purpose of denying an application, suspending or revoking a license, or sanctioning a licensee the term ''professional misconduct,'' as that term is used in section 22a-133v(g) of the Connecticut General Statutes shall include, but not be limited to, an action or omission which:

(A) violates any statute, regulation, permit, or other license relevant to the activities for which such licensee is responsible;

(B) endangers or may endanger human health, safety, welfare or the environment;

(C) falsifies, misrepresents or negligently fails to disclose any relevant fact at any time, including, without limitation, in an application for a license or license renewal, in response to a request for information by the Board, or in a report, opinion or verification;

(D) fails to comply with a reasonable request by the Board for any information relevant to any application, license, report or other documents submitted to the Commissioner or the Board;

(E) demonstrates a lack of good moral character, evidence of which may include, conviction in any jurisdiction of a felonious act, the submission of false or incomplete information on any application, acts involving dishonesty, fraud or deceit which have substantial connection to the professional responsibilities of a licensed environmental professional, or any act specified in section 22a-133v(g) of the Connecticut General Statutes.

(c) **Clerical Errors in Licenses**

(1) At any time after the issuance of a license, the Commissioner may correct clerical error(s) in a license.

(2) If at any time after the issuance of a license, any information, such as the address of the licensee, contained in such license changes, the licensee shall, within fourteen days after such change, advise the Board in writing of such change.

(d) **License Renewals**

(1) To remain valid and effective, a licensee's license shall be renewed annually in accordance with subdivision (2) of this subsection. The provisions of subdivision (a)(4) and (a)(5) of section 22a-133v-3 of the Regulations of Connecticut State Agencies regarding the required certification and date of filing of applications, shall apply to a license renewal application. The Board may also request whatever additional information it deems necessary and may request a personal interview as is provided for in subdivision (a)(8) of section 22a-133v-3 of the Regulations of Connecticut State Agencies regarding the renewal of a licensee's license.

(2) The following specific provisions apply to license renewal and applications therefor:

(A) an application to renew a license shall be made on a form prescribed by the Board and shall be filed with the Board no later than 30 days prior to the expiration of the current license;

(B) an application to renew a license shall be accompanied by a fee of $425.00 in the form of a check or money order made payable to the Department of Energy and Environmental Protection. Such fee is non-refundable; and

(C) in odd numbered calendar years, an application to renew a license shall be accompanied by documentation, on a form prescribed by the Board, that such licensee has fulfilled the continuing education requirements set forth in section 22a-133v-2(e) of the Regulations of Connecticut State Agencies.

(e) (1) Where an individual with an expired license applies for a new license within six months following license expiration, the Board may recommend to the Commissioner that a new license be granted to such individual without such individual retaking and passing the examination required under section 22a-133v-2(c) of these regulations, provided:

(A) the applicant's license has not expired on more than two occasions; and

(B) the applicant complies with the following:

(i) if the application is being made in an odd calendar year, the applicant shall meet all the continuing education credit requirements from the last biennial period. If such applicant had a deficiency in the continuing education credit requirements for the last biennial period, the applicant shall meet the continuing education credit requirements for the last biennial period prior to applying to the Board for reinstatement. In any event, such credits shall not be used to satisfy the continuing education requirements of the new biennial period.

(ii) the application to renew the license is accompanied by the renewal fee and an additional fee of 1.5 times the fee required by section 22a- 133v-4(d)(2)(B) of the Regulations of Connecticut State Agencies;

(iii) the applicant submits an affidavit on a form prescribed by the Board on which the applicant certifies, under penalties of perjury, that the applicant has not affixed his or her seal, or allowed his or her seal to be affixed, to any document following the expiration date of the license.

(2) During the period when a license has expired and before the commissioner has granted a new license in accordance with the above criteria and procedures, the individual with an expired license shall not be included on the roster of environmental professionals, shall not present themselves as a licensed environmental professional and shall not perform professional services as a licensed environmental professional.

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-5. Design and use of licensed environmental professional's seal

(a) **Design and Procurement of a Seal**

(1) Each licensee shall procure a rubber stamp or embossing device for a seal, the design, individual number, size and working of which shall conform with the specifications prescribed by the Board.

(2) Within fifteen days of procuring said seal, a licensee shall stamp or emboss it upon his signature on two sheets of such licensee's letterhead stationery and submit the two sheets to the Board.

(3) A licensee's seal is not transferable to any other person. A licensee shall report a loss or theft of his seal in writing to the Board and the Commissioner no later than 15 days after discovery. Misuse of the lost or stolen seal by others shall

remain the responsibility of the licensee until notification of such loss or theft is received by both the Board and the Commissioner.

(b) **Use of a Seal**

(1) A licensee's seal shall only be used by such licensee in connection with verifications or other documents pertaining to verifications for which such licensee is responsible. A licensee shall only use a seal during the time when such licensee has been issued a currently valid effective license issued by the Commissioner.

(2) A licensee shall use a seal to attest that in such licensee's professional judgment, the verification, and the professional services rendered in connection with such verification, comply with the provisions of sections 22a-133o, 22a-133w, 22a-133x, 22a-133y, 22a-133aa, 22a-133bb, 22a-133ee and 22a-134a of the Connecticut General Statutes, sections 22a-133k-1 through 22a-133k-3, inclusive, section 22a-133q-1, and sections 22a-133v-1 through 22a-133v-8, inclusive, of the Regulations of Connecticut State Agencies.

(3) A licensee shall not affix such licensee's seal to any document other than a verification or other document pertaining to a verification. Where documents are bound together, the application of the seal on one sheet or page shall be considered applied to all such sheets or pages.

(4) A licensee may seal, or sign and seal, a verification or other document pertaining to a verification, provided such licensee shall prepare, and retain for a period of not less than six years, records pertaining to such verification sufficient to reconstruct the basis for such verification including all alternatives considered. Such records shall clearly identify the project and the documents to which it relates, and the name of the person or organization for which the verification was conducted and the date of such verification.

(5) A licensee shall not affix, or allow such licensee's seal to be affixed, on any verification for a parcel in which the licensee or licensee's employer has a financial interest, exclusive of professional services fees.

(6) A licensee shall not affix, or allow such licensee's seal to be affixed, to any verification or any other document in any manner other than is provided for in this subsection.

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-6. Rules of professional conduct

(a) **Definitions**

As used in this section, the term licensed environmental professional or licensee shall also include all individuals placed on an interim list of environmental professionals pursuant to section 22a-133v of the Connecticut General Statutes.

(b) **General**

(1) In order to establish and maintain a high standard of integrity, skills and practice in the environmental profession and to safeguard the environment and the health, safety, property, and welfare of the public, the following rules of professional conduct shall apply to every licensed environmental professional. The Board may conduct investigations regarding the professional conduct of any licensee.

(2) Each licensee and applicant shall be deemed to be thoroughly familiar with all the provisions of this section.

(3) This section shall apply to all professional services provided by a licensee in Connecticut, even if a license issued pursuant to section 22a-133v of the Connecticut General Statutes is not required to provide such services.

(c) **Professional Competency**

(1) In providing professional services, a licensee shall act with reasonable care and diligence and shall apply the knowledge and skill of a licensee in good standing practicing in the applicable field at the time such services are performed.

(2) A licensee may perform professional services only when qualified by education or experience, and only to the extent such services involve activities with respect to which such licensee is so qualified. In rendering professional services, a licensee may rely, in part, upon the advice of one or more persons whom such licensee determines are qualified by education or experience to the extent that such reliance is consistent with the common and accepted practice of a licensed environmental professional.

(d) **Professional Conduct**

(1) In the rendering of professional services, a licensee shall, at all times, hold paramount the health, safety and welfare of the public and the environment.

(2) In rendering professional services, a licensee shall at all times:

(A) exercise professional judgment;

(B) follow the requirements and procedures set forth in the applicable provisions of sections 22a-133o, 22a-133x, 22a-133y and 22a-134a of the Connecticut General Statutes, sections 22a-133k-1 through 22a-133k-3, inclusive, sections 22a-133v-1 through 22a-133v-8, inclusive, and 22a-133q-1 of the Regulations of Connecticut State Agencies, and any other statute, regulation, permit or other license, approval, or order of the Board or the Commissioner; and

(C) make a good faith and reasonable effort to identify and obtain the relevant data and other information evidencing conditions at a parcel and identify and obtain such additional data and other information as necessary to discharge such licensee's obligations under sections 22a-133o, 22a-133x and 22a-133y and 22a-134a of the Connecticut General Statutes, and sections 22a-133v-1 through 22a-133v-8, inclusive, and 22a-133q-1 of the Regulations of Connecticut State Agencies.

(3) If after rendering professional services at a parcel, a licensee learns that a condition at such parcel, relevant data or other information which existed at the time such services were rendered, leads to a conclusion or recommendation contrary to, or significantly different from, the one previously expressed by such licensee, such licensee shall promptly (A) notify his or her client in writing of such, and (B) notify the Commissioner if such conclusion or recommendation was expressed to the Commissioner in a verification or other document pertaining to a verification.

(4) A licensee shall not allow the use of his name by, or associate in a business venture with, any person or firm which such licensee knows or reasonably should know is engaging in fraudulent business or professional practices.

(5) A licensee shall not, whether orally or in writing, falsify, omit or misrepresent relevant facts concerning such licensee's (A) past accomplishments or the academic or other qualifications of such licensee; and (B) employers, employees, associates, joint ventures and their past accomplishments or academic or professional qualifications.

(6) A licensee or applicant shall cooperate fully in an investigation conducted by the Commissioner or the Board.

(7) No licensee whose license has expired, and any other individual who does not have a license, shall render or offer to render professional services or represent himself as being a licensed environmental professional.

(e) **Conflict of Interest**

(1) A licensee shall not accept monetary or other compensation or render professional services, pertaining to a parcel, from persons having or potentially having conflicting or potentially conflicting interests, unless such licensee fully discloses in writing to each such person such conflict or potential conflict and each such person agrees in writing to utilize the services of such licensee notwithstanding such conflicting or potentially conflicting interests.

(2) A licensee shall not permit any person, other than an employer, partner, employee, or associate in a professional firm, to share in the fees for professional services he renders or will render, unless the fee splitting arrangement between such licensee and any other person has been fully disclosed to and agreed to in writing by the client engaging the services of such licensee.

(3) A licensee shall conscientiously avoid a conflict or potential conflict of interest with his client, but when unavoidable shall immediately upon learning of such conflict or potential conflict, fully disclose in writing to the client the nature and source of such conflict or potential conflict. If the conflict or potential conflict is irresolvable, such licensee shall terminate the rendering of professional services to such client.

(4) A licensee shall not involve himself in any way, or in any way attempt to influence, the making of a decision by a public body on which such licensee serves regarding any work such licensee or such licensee's firm has been retained to perform.

(5) A licensee shall not directly or indirectly solicit or accept a gift, loan or other benefit other than a fee from any person, including, but not limited to a client, contractor, or subcontractor if such benefit:

(A) influences, or reasonably gives the appearance that it could influence the judgment or findings of such licensee; or

(B) could give rise to the appearance of a conflict or impropriety.

(6) A licensee shall not solicit or accept a contract to render professional services for or from a public body on which he or she serves as a member, employee, or advisor. Such licensee shall not participate as a member, advisor, or employee of a public body with respect to actions or deliberations which pertain to services provided to such body by such licensee.

(7) A licensee shall not affix, or allow his or her seal to be affixed, on a verification for a parcel in which his or her employer has a financial interest, exclusive of professional services fees.

(8) A licensee shall not offer, directly or indirectly, to give to a person, except to a full time employee of such licensee or of such licensee's employer, or a public body any commission, political contribution, loan, gift or other consideration in order to secure work.

(f) **Contingent Fees**

A licensee shall not solicit, offer or render professional services pursuant to any contingent fee arrangement.

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-7. Hearings

(a) **Definitions**

For the purposes of this section, the following terms shall be defined as they are defined in section 4-166 of the General Statutes: contested case, final decision, hearing officer, presiding officer, intervenor, license, licensing, party and proposed final decision. The following terms shall be defined as they are defined in section

22a-133v-1 of the Regulations of Connecticut State Agencies: applicant, application, Board, examination, licensee, licensed environmental professional, and person. For the purposes of this section, the term ''Board'' shall, unless the context indicates otherwise, include a designee appointed by the Board to conduct a hearing.

(b) **Scope and Applicability**

(1) Unless otherwise provided by law, this section governs all hearings to be conducted by the Board.

(2) Notwithstanding the action of any person acting as its agent, the Board shall retain its authority to take any action authorized by law including the authority to take any action a presiding officer may take. Any action of the Board shall preempt the action of the hearing officer or other agent of the Board.

(c) **Commencement and Termination of Proceedings**

(1) Pursuant to section 22a-133v of the Connecticut General Statutes, a proceeding commences when the Board issues notice of the proposed revocation or suspension of a license, notice of the proposed sanction of a licensee or notice proposing to deny a license to an applicant on grounds other than the applicant's failure to pass the examination required by section 22a-133v of the Connecticut General Statutes.

(2) A proceeding terminates when (A) the Commissioner takes action in conformance with a final decision of the Board regarding the revocation, suspension or denial of a license or any other sanctions imposed upon a licensee; (B) a licensee or applicant withdraws a request for hearing filed pursuant to subsection (r) of this section; (C) the lawful time for filing a request for hearing pursuant to subsection (r) of this section has expired without the filing of such request; or (D) the Board otherwise determines that the proceeding has terminated.

(d) **Computation of Time**

In computing any period of time prescribed under this section for a ruling, a proposed final decision, an approval, or other action of the Board, the day of the act, event or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, a Sunday, or a Connecticut or federal holiday, in which case such period runs until the end of the next day which is not a Saturday, a Sunday, or a Connecticut or federal holiday.

(e) **Media**

Any hearing conducted pursuant to this section which is open to the public may be recorded, photographed, broadcast, or recorded for broadcast in accordance with the provisions of subsection (a) of section 1-21a of the General Statutes, provided the hearing is not so disturbed as to impair any person's ability to hear or be heard or to present evidence or argument. In order to minimize disruption of a hearing, the hearing officer or Board may impose reasonable limits on any person engaged in recording, photographing, broadcasting, or recording for broadcast.

(f) **Attendance**

Any person who attends a hearing conducted pursuant to this section but who is not a party or a witness for a party and who does not intend to speak shall not be required to give his name or any other information or to satisfy any condition precedent to his attending the hearing.

(g) **Recording of Hearings**

Hearings conducted pursuant to this section shall be recorded either stenographically or electronically. The recording of a hearing or any part thereof shall be transcribed by or through the Board (1) on request of any person, provided such person shall pay the cost of transcription and recording, or (2) in accordance with

section 22a-6d of the General Statutes. Subject to the reasonable control of the Board, a party or an intervenor may record any portion of a hearing in which the Board participates. Settlement discussions conducted under subsection (s) of this section do not constitute a portion of a hearing under these regulations and shall not be recorded unless all of the participants in such discussions consent to recording.

(h) **Suspension and Reconvening of Hearings**

Except as provided in subdivision (s)(2) and subparagraph (hh)(3)(B) of this section, the Board, as it deems appropriate, may continue a hearing to another time and place.

(i) **Disruption of Hearings**

If any person disrupts a hearing or otherwise interferes with the orderly conduct of such hearing, the Board may order such person to leave such hearing or may suspend the hearing and reconvene it at an appropriate place and time.

(j) **Electronic Filing**

Except as provided for in subdivision (k)(8) of this section, no document submitted to the Board and no petition, request or motion may be electronically filed without the Board's consent and the consent of all parties to such proceeding.

(k) **Filing, Service, and Form of Pleadings**

(1) Except as otherwise provided in this subdivision, the original of any pleading which is required or allowed to be filed under this section shall be filed with the Board.

(2) The first page of every pleading shall contain a caption identifying the applicant or licensee and the application or license number or any other designation prescribed by the Board.

(3) Every pleading shall be signed by the person filing or by his attorney or other representative, if any. The signature constitutes a representation by the signer that he has read the pleading, that to the best of his knowledge, information and belief the statements made therein are true and complete, and that the pleading is not filed for the purpose of delay or harassment.

(4) The initial pleading filed by any person shall contain the name, address and telephone number of the person filing and of his attorney or other representative, if any. Any change in this information shall, within seven days after such person becomes aware of such change, be communicated in writing to the Board and to all persons upon whom pleadings shall be served under subdivision (5) of this subsection.

(5) A copy of every pleading shall be served personally or by mail upon all parties and intervenors and upon any person who, to the knowledge of the pleader, has filed a request for status as a party or intervenor but whose request has not yet been disposed of. Every pleading filed shall be accompanied by a certification in substantially the following form:

> I [name] hereby certify that a copy hereof was [personally delivered] [mailed in a properly addressed, first class postage pre-paid envelope] on [date] to the following persons at the following addresses: [signature of person making service]

(6) Service of pleadings shall be complete upon personal delivery or mailing. When a pleading is served by mail, three days shall be added to any time allowed for the filing of a responsive pleading.

(7) The date of the filing of any pleading required or allowed under this section shall be the date such pleading is received by the Board.

(8) No pleading shall be filed electronically without the consent of the Board and the other parties and intervenors, and no pleading shall be served electronically on any party or other person without the consent of such party or person.

(9) The Board may reject any filing for failure to comply with any requirement of this subsection.

(*l*) **Orders, Rulings and Decisions**

(1) Unless otherwise provided by law, the notice or order regarding the suspension, revocation or denial of a license, or any other sanctions imposed upon a licensee under section 22a-133v of the Connecticut General Statutes shall be served by personal delivery, by a sheriff or other indifferent person, by certified mail, return receipt requested, by first-class mail, or in the manner provided by law for service of civil process. A written ruling shall, unless distributed to all parties and intervenors at the hearing, pre-hearing conference, or oral argument, be issued by first-class mail, and three days shall be added to any time allowed for the filing of a pleading responding to a ruling which has been mailed.

(2) Unless otherwise provided by law, a ruling, proposed final decision, or final decision shall be deemed issued upon mailing or personal delivery.

(m) **Powers and Duties of the Board**

(1) The Board shall conduct a fair and impartial hearing, assure that the relevant facts are fully elicited, adjudicate issues of law and fact, and prevent delay and harassment.

(2) In addition to any other powers provided by law, the Board or its designee shall have the power to:

(A) Determine the scope of the hearing;

(B) Dispose of motions and requests and make all necessary or appropriate rulings;

(C) Administer oaths and affirmations;

(D) Subpoena witnesses and evidence, examine witnesses, and control the examination of witnesses;

(E) Admit or exclude evidence and rule on objections to evidence;

(F) Impose sanctions in accordance with subsection (n) of this section;

(G) Consolidate proceedings or portions thereof;

(H) Issue final decisions, or as appropriate, proposed final decisions; and

(I) Do any other acts and take any other measures appropriate to administer this section, expedite proceedings, and maintain order.

(n) **Hearing Sanctions**

If a party or intervenor or the attorney or other representative of a party or intervenor fails to comply with the regulations in section 22a-133v-7 of the Regulations of Connecticut State Agencies governing the conduct of hearings or with a ruling of the Board, the Board may, on motion or on its own initiative, impose sanctions, including but not limited to continuance or termination of the proceeding, exclusion of testimony or other evidence, the drawing of an adverse inference against the non-complying party or intervenor.

(o) **Burdens of Proof**

Unless otherwise provided by law, in a hearing to revoke, suspend or deny a license, or impose any other sanctions upon a licensee the Board shall have the burden of going forward with evidence and the burden of persuasion. In a hearing to deny an applicant a license, the applicant shall have the burden of going forward with evidence and the burden of persuasion with respect to each issue which the Board is required by law to consider in deciding whether to authorize the Commissioner to

issue or deny such license. Each factual issue in controversy shall be determined upon a preponderance of the evidence.

(p) **Representatives**

A party or intervenor may appear in person or by an attorney or other representative. Attorneys shall conform to the standards of conduct and ethics required of practitioners before the courts of Connecticut.

(q) **Motions**

(1) A motion is any request to the Board.

(2) All motions shall (A) be in writing unless made orally on the record, (B) state with particularity the grounds therefor, and (C) set forth the relief or ruling sought.

(3) Within seven days of service of a written motion or such other time as the Board may prescribe, any party or intervenor may file a response supporting or opposing the motion. The movant shall have no right to reply except as permitted by the Board.

(4) The movant shall have the burden of demonstrating that the relief or ruling sought in the motion should be granted.

(r) **Requests for Hearing**

(1) A request for a hearing regarding the Board's issuance of a notice to revoke, suspend or deny a license, or impose any other sanctions upon a licensee shall be filed with the Board within twenty days of the Board's issuance of such notice. The request for a hearing shall be in writing and shall include a copy of the Board's notice of revocation, suspension, or denial of a license.

(2) A request for hearing shall state specifically any findings to which the licensee or applicant objects and any other grounds for contesting the Board's action to revoke, suspend or deny a license or impose any other sanctions upon a licensee. The Board may require, or any party or intervenor may file a motion requesting, a more particular statement from the licensee or applicant if the request for hearing does not give adequate notice of the grounds for contesting the Board's action to revoke, suspend, or deny a license.

(3) An application by a licensee or applicant for a more definite and detailed statement pursuant to subsection 4-177(b) of the Connecticut General Statutes shall be made no later than the date by which the request for hearing shall be filed under subdivision (1) of this subsection. The filing of such an application shall not stop the running of the time period for filing a request for hearing. The applicant may amend his or her request for hearing within twenty days after the Board serves a more definite and detailed statement.

(4) Any applicant or licensee may withdraw any such request for a hearing at any time.

(s) **Scheduling Hearings and Settlement Conferences**

(1) (A) Unless the notice to revoke, suspend or deny a license or impose any other sanctions upon a licensee includes notice of a scheduled hearing date, the Board may, upon the filing of a request for hearing under subdivision (1) of subsection (r) of this section, solicit comments from the parties and intervenors concerning an appropriate date and location for a hearing. Upon receipt of comments the Board shall set a date for hearing, taking into consideration any threat to public health, safety, welfare or the environment posed by the violations or conditions alleged in the notice and the parties' and intervenors' schedules.

(B) Upon scheduling the hearing, the Board shall mail notice of the time, place, and nature of the hearing to all parties and intervenors and to any person who has

filed a request for status as a party or intervenor but whose request has not yet been disposed of.

(C) Upon scheduling the hearing, the Board may schedule a settlement conference. The purpose of the settlement conference is to determine whether the dispute can be resolved without a hearing and to facilitate such a resolution.

(D) If the Board determines during the settlement conference that resolution of the dispute without a hearing is likely, it may reschedule the hearing.

(E) Each party and intervenor shall appear at any settlement conference which is scheduled. If any party fails without good cause to appear, the Board may proceed with the conference.

(F) At least one of the attorneys or other representatives for each party and intervenor participating in the settlement conference shall have authority to enter into agreements and stipulations regarding all matters that the participants should reasonably anticipate may be discussed at the settlement conference.

(G) If no appearance is made by or on behalf of a party or intervenor at the settlement conference, or if a party or intervenor or his attorney or other representative is substantially unprepared or is unauthorized to participate fully in the conference or fails to participate in good faith, the Board may impose sanctions in accordance with subsection (n) of this section.

(H) Nothing in this subsection shall preclude the Board from meeting, whether on request or on its own initiative, with the parties and intervenors at any time for the purpose of facilitating settlement.

(2) Neither a settlement conference nor a hearing shall be continued at the request of a party or intervenor except upon motion demonstrating that there is good cause for a continuance. In ruling on such a motion, the Board shall consider whether a continuance would prejudice the public health, safety or welfare, or the environment. Any continuance granted shall be for a specific length of time.

(t) **Intervention**

(1) A person shall be granted status as an intervening party if:

(A) A statute, including but not limited to sections 22a-19 and 22a-99 of the Connecticut General Statutes, confers a right to such status, provided that any conditions for party status specified in such statute have been satisfied; or

(B) Such person has filed a written request stating facts which demonstrate that

(i) such person's legal rights, duties or privileges will or may reasonably be expected to be affected by the decision in the proceeding,

(ii) such person will or may reasonably be expected to be significantly affected by the decision in the proceeding, or

(iii) such person's participation is necessary to the proper disposition of the proceeding.

(2) A person may be granted status as an intervenor if such person has filed a written request stating facts which demonstrate that such person's participation is in the interests of justice and will not impair the orderly conduct of the proceeding.

(3) A request for status as a party or intervenor under this subsection shall be filed no later than five days before the date of the hearing, if one has been scheduled, except that such five-day requirement may be waived by the Board at any time before or after the commencement of the hearing for good cause shown. The request shall be served upon all parties and intervenors and any person known to have filed a request for status as a party or intervenor but whose request has not yet been disposed of.

(4) Unless otherwise provided by the Board, any objections to a request for party or intervenor status shall be filed within seven days of the service of the request for party or intervenor status.

(5) The ruling on a request for status as a party or intervenor shall be provided to the person filing the request, all parties and intervenors, and any person who has filed a request for status as a party or intervenor but whose request has not yet been disposed of.

(6) The Board may restrict the participation in the proceeding of a person granted intervenor status under subdivision (2) of this subsection, although only to the extent necessary to promote justice and the orderly conduct of the proceeding. If a request for intervenor status under subdivision (2) of this subsection is granted, the Board shall in its ruling on the request define (A) the issues with respect to which the intervenor may participate and (B) the intervenor's rights to discovery, to introduce evidence and offer argument, and to cross-examine witnesses. The Board may at any time amend its initial ruling concerning an intervenor's participation.

(7) Except for good cause shown, a person granted status as a party or intervenor under this subsection is bound by the Board's rulings issued as of the time such person files a request for party or intervenor status. Unless otherwise restricted pursuant to subdivision (6) of this subsection, after a person's request for party or intervenor has been granted, such person shall have the same rights, obligations, and privileges as all other parties and intervenors.

(u) **Notices to Appear and Subpoenas for Hearing**

(1) A party or intervenor may compel the appearance at a hearing of, or the production of documents at a hearing by, another party or intervenor by serving upon such party or intervenor a notice to appear or produce. The notice, if a notice to produce, shall state with particularity the documents which are to be produced. A copy of a notice served under this subdivision shall be filed concurrently with the Board. Except for good cause shown, a notice under this subdivision shall be ineffective unless it is received by the Board or the person to whom it is directed at least five days before the time designated in the notice to appear or produce.

(2) A party or intervenor may compel the appearance at a hearing of, or the production of documents at a hearing by, any person who is not a party or intervenor by the issuance of a subpoena in accordance with the following:

(A) If the party or intervenor is represented by an attorney, the attorney may issue such subpoena pursuant to section 51-85 of the Connecticut General Statutes. To prevent harassment or unnecessary inconvenience to a subpoenaed witness, the Board may exclude the testimony of such a witness if he or she did not receive the subpoena at least five days before the time designated therein to appear or produce.

(B) If the party or intervenor is not represented by an attorney, he or she may move the Board or, if the Board has designated another person to conduct the hearing, such other person to issue a subpoena requiring the appearance of the person or the production of the documents at the hearing. Except for good cause shown, such a motion shall be filed no later than 14 days before the hearing commences. Such a motion shall include the name and address of the person and a description of any documents to be subpoenaed, and shall state the reason for the motion. Unless the requested subpoena would be subject to quashing under subdivision (9) of this subsection and unless the Board or its designee finds that the testimony or documents sought are clearly inadmissible, he or she shall issue the subpoena and mail or deliver it to the party or intervenor requesting it, which party or intervenor shall arrange for its service. Except for good cause shown, a subpoena

issued under this subparagraph shall be ineffective unless it is received by the person to whom it is directed no later than five days before the hearing commences.

(3) A subpoena issued by the Board or its designee shall contain the name of the Board and the title of the proceeding, and shall command the person to whom it is directed to appear to produce specified documents at a designated time and place.

(4) Upon notice to the parties and intervenors, the Board or its designee may on its own initiative issue a notice or subpoena requiring the appearance of a party, intervenor, or other person or the production of documents at a hearing. The form and service of such notice or subpoena shall be as described in subdivision (1) or (3) of this subsection, as the case may be, of this subsection, and such notice or subpoena shall be subject to the provisions of subdivision (5) of this subsection.

(5) On motion made or on his or her own initiative, the Board or its designee may: (A) quash, modify, or issue a protective order with respect to a subpoena to appear or produce issued by the Board or its designee or a notice to appear if such notice or subpoena is unreasonable or requests evidence that is irrelevant or immaterial or (B) condition denial of the motion on such terms as the Board or its designee deems appropriate.

(6) A subpoena to appear or produce issued by the Board or its designee shall advise that such subpoena may be quashed, modified, or subjected to a protective order in accordance with subdivision (5) of this subsection.

(7) A notice to appear or produce shall be personally served by a sheriff or other indifferent person or by certified mail, return receipt requested. A subpoena to appear or produce issued by the Board or its designee shall be personally served by a sheriff or other indifferent person.

(8) If any party or intervenor fails to comply with a notice to appear or produce, the Board or its designee may impose sanctions in accordance with subsection (n) of this section. If any person fails to comply with a subpoena it issues, the Board may apply to the superior court for enforcement of the subpoena in accordance with section 4-177b of the Connecticut General Statutes.

(9) A subpoena or notice to appear directed to any member of the Board shall be quashed unless there is a clear showing by the party or intervenor who served the notice to appear or on whose behalf the subpoena was issued that such member of the Board has personal knowledge of relevant and material facts, that no other person has knowledge of such facts, and that it would work an injustice if such member of the Board did not testify.

(v) **Discovery**

(1) A party or intervenor may obtain discovery only as provided in this subsection. Nothing in this subsection shall require the disclosure of materials protected from disclosure under section 1-19 of the General Statutes or any other provision of law.

(2) Discovery under this subsection may commence after the filing of a request for hearing under subsection (r) of this section or the scheduling of a hearing by the Board.

(3) (A) Except as provided in subparagraph (B) of this subdivision, a party or intervenor may serve upon any other party or intervenor a request to inspect, copy, photograph or otherwise reproduce designated documents (including but not limited to writings, drawings, graphs, charts, photographs, audio or video recordings, or computer records) which are relevant and material to the subject of the proceeding, which are in the possession, custody or control of the party, intervenor, or other person upon whom the request is served, and which can be provided by the disclosing party, intervenor, or person with substantially greater facility than they could other-

wise be obtained by the party or intervenor seeking disclosure. The request shall clearly designate the documents to be inspected and copied and shall specify a reasonable place and manner of making the inspection and copies. A copy of the request shall be concurrently filed with the Board and served on all other parties and intervenors. Unless the parties and intervenors agree otherwise or the Board provides otherwise, the cost of copying documents shall be borne by the party or intervenor requesting discovery. Nothing in this section shall be construed to require that a party or intervenor conduct any analysis or other manipulation of computer data.

(B) A party or intervenor may serve a discovery request upon another party or intervenor who is not represented by counsel only with the Board's prior approval. A motion to the Board seeking such approval shall

(i) include a copy of the proposed discovery request, which request shall conform to the provisions of subparagraph (A) of this subdivision; and

(ii) demonstrate that such request is genuinely necessary and appropriate to achieve a just and expeditious resolution of the proceeding.

(4) A party or intervenor upon whom a request for discovery is served shall either

(A) comply with the request within 14 days of service thereof; or

(B) file an objection to the request or any part thereof within seven days of service thereof.

It shall not be ground for objection that the documents sought will be inadmissible at hearing if they appear reasonably calculated to lead to the discovery of admissible evidence. Compliance with a request for discovery shall consist, at the discretion of the complying party or intervenor, either of allowing inspection and copying or of providing the requester with clean, legible copies of the originals, together with an affidavit by a person with knowledge stating that the copies are true and accurate copies of the originals. Objection to certain parts of a request for discovery shall not relieve the objecting party or intervenor of the obligation to comply with those parts of the request to which no objection has been made. An objection shall state with particularity the grounds therefor. The party or intervenor making the request, and any other party or intervenor, may file a response to an objection within five days of service thereof. If the Board overrules an objection, compliance with the request shall be made at a time set by the Board.

(5) All evidentiary privileges recognized at common law or provided by the Connecticut General Statutes, as well as the work product privilege as set forth in Chapter 8 of the Connecticut Superior Court Rules, shall apply to discovery under this subsection.

(6) Whether compliance with a request to inspect and copy documents is made by providing copies of documents or by allowing inspection and copying, the complying party or intervenor shall at the time of compliance furnish the requesting party or intervenor with an affidavit by a person with knowledge stating that the documents produced constitute a full and complete response to the request.

(7) If at any time after complying with a request for discovery, the complying party or intervenor discovers that there are or may be additional or new documents responsive to the request, within five days of such discovery he or she shall supplement his prior document production response.

(8) If a party or intervenor upon whom a request for discovery has been served neither objects to the request nor complies with it in good faith, or does not obey a ruling on an objection made under subdivision (4) of this subsection, the Board may impose sanctions in accordance with subsection (n) of this section. Except for

good cause shown, the Board shall not enforce multiple discovery requests by the same party or intervenor.

(9) A party or intervenor may move the Board or, if the Board has designated another person to conduct the hearing, such other person to issue a subpoena requiring that a person who is not a party or intervenor produce documents for the purpose of discovery. Such motion shall include the name and address of the person to whom the subpoena is to be directed and a description of the documents to be subpoenaed, and shall state the reason for the motion. A motion under this subdivision prepared by an attorney shall include a draft of the subpoena requested. Any party or intervenor making a motion under this subdivision shall serve a copy of such motion upon the person who is the subject of the requested subpoena and shall give notice in the motion that such person may, within seven days of service thereof, file an objection to issuance of the subpoena. Unless the Board or its designee finds that the material sought is irrelevant and immaterial, it shall issue the subpoena and mail or deliver it to the party or intervenor requesting it, which party or intervenor shall arrange for its service. Except for good cause shown, a subpoena issued under this subdivision shall be ineffective unless it is received by the person to whom it is directed no later than five days before the date prescribed for production of the documents. A subpoena issued under this subdivision shall contain the information described in subdivisions (3) and (6) of subsection (u), shall be served in accordance with subdivision (7) of subsection (u), and may be quashed, modified, or subjected to a protective order in accordance with subdivision (5) of subsection (u). The Board may enforce a subpoena issued under this subdivision in accordance with subdivision (8) of subsection (u).

(w) **Preservation of Evidence**

The Board may provide by any appropriate means, including the taking of oral testimony by deposition, for the preservation of relevant and material evidence when the Board determines that there is a serious likelihood that such evidence will be unavailable at the time of the hearing. The Board or its designee may issue subpoenas as necessary to carry out the provisions of this subsection.

(x) **Prehearing Conferences**

(1) The Board may encourage prehearing conferences to simplify the hearing and aid in a speedy and fair disposition of the proceeding. To those ends, the Board may, on motion or on its own initiative, schedule and hold a prehearing conference among the parties and intervenors to:

(A) Clarify and simplify the factual issues for hearing, identify the legal issues in dispute, and determine whether any legal issues should be briefed before the hearing;

(B) Stipulate to facts and the admissibility of testimony and other evidence;

(C) Identify and, as appropriate, limit witnesses to be called and documents to be offered at the hearing, and identify the matters about which each witness will testify;

(D) Mark exhibits to be admitted or offered into evidence;

(E) Dispose of pending motions and disputes about discovery; and

(F) Take such other actions as may aid in the orderly and expeditious disposition of the proceeding.

(2) The prehearing conference shall, unless impracticable, be held at least fourteen (14) days before the hearing commences.

(3) Each party and intervenor shall appear at the prehearing conference. If any party or intervenor fails without good cause to appear, the Board may proceed

with the conference and may make decisions concerning all matters for which the conference was scheduled, which decisions shall bind all parties and intervenors.

(4) At least one of the attorneys or other representatives for each party and intervenor participating in the prehearing conference shall have authority to enter into stipulations and to make admissions regarding all matters that the participants should reasonably anticipate may be discussed at the prehearing conference.

(5) After the prehearing conference, the Board may, and at the request of any party or intervenor shall, issue a prehearing conference order reciting the actions taken at the prehearing conference. The prehearing conference order shall, unless modified by the Board on the record, control the subsequent course of the proceeding. A prehearing conference order shall be modified only for good cause.

(6) If no appearance is made by or on behalf of a party or intervenor at a prehearing conference, or if a party or intervenor or his attorney or other representative is substantially unprepared or is unauthorized to participate fully in the conference or fails to participate in good faith, or if a party or intervenor or his attorney or other representative fails to obey a prehearing conference order, the Board may impose sanctions in accordance with subsection (n) of this section or may grant an appropriate continuance to any party or intervenor prejudiced by the disobedience, or both.

(y) **Advance Submission of Proposed Evidence**

(1) In a proceeding on an application the applicant shall, regardless whether a prehearing conference is held and unless an earlier filing is required by the Board or a later filing is allowed for good cause shown, file no later than fifteen (15) days before the hearing:

(A) A copy of all documents, including the application and any amendments thereto, which the applicant plans to offer into evidence at the hearing;

(B) A list of witnesses the applicant plans to call at the hearing and a summary of the matters about which each witness will testify; and

(C) For each expert witness the applicant plans to call, a resume and a statement of the facts and opinions about which the expert will testify and a summary of the grounds for each opinion.

At the time the applicant files the foregoing papers, he or she shall serve a copy thereof on all parties and intervenors.

(2) Prior to any hearing the Board may, on motion or its own initiative, direct any party or intervenor to file before the hearing the following materials, provided that a party or intervenor planning to offer written testimony on direct examination shall be required to file such testimony no later than ten days before the hearing:

(A) A copy of all documents which the party or intervenor plans to offer into evidence at the hearing;

(B) A list of witnesses the party or intervenor plans to call at the hearing and a summary of the matters about which each witness will testify;

(C) For each expert witness the party or intervenor plans to call, a resume and a statement of the facts and opinions about which the expert will testify and a summary of the grounds for each opinion; and

(D) Any other or additional material.

(3) Upon objection by a party or intervenor, the Board shall not admit into evidence any document or testimony which was not submitted or identified before the hearing in accordance with subdivision (1) or a ruling under subdivision (2) of this subsection unless the party or intervenor offering the document or testimony demonstrates good cause for the failure to submit or identify it earlier. If the Board

admits such document or testimony, he or she may grant an appropriate continuance to any party or intervenor prejudiced thereby.

(z) **Oaths**

The Board shall administer the oath or affirmation, in accordance with Chapter 4 of the Connecticut General Statutes, to each witness, including a speaker who gives sworn testimony pursuant to subsection (bb) of this section, before any evidence is taken from such witness.

(aa) **Evidence, Objections, Offers of Proof**

(1) Evidence shall be received in accordance with section 4-178 of the Connecticut General Statutes. The Board shall not admit any evidence which is irrelevant, immaterial, unduly repetitious, untrustworthy, or unreliable.

(2) Subject to the reasonable control of the Board, all parties shall have the right to cross-examine any witness, including any speaker who gives sworn testimony pursuant to subsection (bb) of this section.

(3) The Board may admit into evidence, in lieu of oral testimony on direct examination, a written statement of fact or opinion prepared by a witness, other than a speaker who gives sworn testimony pursuant to subsection (bb) of this section, provided that any requirements for prehearing submission of documents have been satisfied. The admissibility of the contents of the statement shall be subject to the same evidentiary rules as if such contents were presented as oral testimony. Before any such statement is read or admitted into evidence, the witness shall provide a copy of the statement to the Board, the court reporter if there is one, and all parties and intervenors. The witness presenting the statement shall swear to or affirm the statement and shall be subject to cross-examination on the contents thereof.

(4) Any objection to the admission of evidence shall be supported by a concise statement of the grounds therefor. The Board's ruling on the objection shall be part of the record.

(5) Whenever evidence is excluded, the party or intervenor offering the evidence may make an offer of proof. An offer of proof for excluded testimony shall consist, at the discretion of the Board, of either the excluded testimony or a summary thereof. An offer of proof for excluded documents shall consist of the insertion in the record of the documents excluded. At the discretion of the Board, an offer of proof may be subject to cross-examination.

(bb) **Speakers**

Any person who is not a party or intervenor nor called by a party or intervenor as a witness may make an oral or written statement at the hearing. Such a person shall be called a speaker. If the Board is going to consider a speaker's statement of evidence or if the speaker wants his or her statement to be considered evidence, the Board shall require that the statement be made under oath or affirmation and shall permit the parties and intervenors to cross-examine the speaker and to challenge or rebut the statement. A speaker may decline to be cross-examined, but the Board shall strike from the record any comments by such speaker relating to the subject on which he or she declines to be cross-examined. The Board may control the time and duration of a speaker's presentation, and may exclude irrelevant, immaterial, or unduly repetitious comments by a speaker. A speaker shall not be entitled to cross-examine parties, intervenors, or other speakers or to object to evidence or procedure.

(cc) **Failure to Appear**

(1) If an applicant or a licensee fails to appear at a scheduled hearing, the request for hearing filed under subdivision (1) of subsection (r) shall be deemed withdrawn and any right to a hearing waived. The applicant or licensee may, within no more

than fourteen (14) days after the scheduled hearing date, move the Board to reopen the proceeding. Any such motion shall be denied unless the movant demonstrates that there was compelling reason for his or her failure to appear.

(2) If an applicant or a licensee does not appear at a scheduled hearing and does not file a timely motion to reopen, or files a timely motion to reopen but the motion is denied, the Board shall authorize the Commissioner to revoke, suspend or deny such license, as the case may be.

(3) If a party or intervenor does not appear at an oral argument scheduled upon his or her request, such request shall be deemed withdrawn and any right to oral argument waived. Such party may, within no more than fourteen (14) days after the scheduled oral argument date, move the Board to reschedule oral argument. The motion shall be denied unless the movant demonstrates that there was compelling reason for the failure to appear, and the Board may proceed to issue the final decision.

(dd) **The Record**

(1) In addition to the items specified in section 4-177(d) of the Connecticut General Statutes, for the purposes of a Board proceeding the record shall include:

(A) any briefs or exceptions filed before or after issuance of the proposed final decision, and

(B) any correspondence between the Board and any party, intervenor, or other person concerning the proceeding.

(2) The evidentiary record shall be maintained separately from the rest of the record. The evidentiary record shall consist, in addition to the recording of the hearing, of all documents offered into evidence (exhibits), regardless whether they are admitted. Exhibits which are not admitted shall be marked ''for identification.''

(3) The Board shall not deem a transcript of a hearing to be part of the record, and shall not transmit a transcript of a hearing to the superior court in the event of an appeal from a Board proceeding, unless such transcript was prepared by or through the Board and the sealed original of such transcript, if not prepared by the Board, was delivered directly by the transcriber to the Board.

(ee) **Voluntary Termination of Proceedings**

The Board may voluntarily terminate proceedings by revoking a notice issued in accordance with subsection (c) of this section at any time before a final decision is issued, provided that it shall give notice to the parties and intervenors of its intent to terminate any such proceedings. Objections to such revocation may be filed with the Board within seven days of the service of such notice. Nothing herein shall preclude the Board from revoking a notice issued in accordance with subsection (c) of this section after a proceeding has terminated.

(ff) **New Evidence**

Unless the Board rules otherwise, after the hearing no further evidence shall be admitted unless it is relevant and material and there was good cause for the failure to offer it at the hearing. Whenever new evidence is admitted after the hearing, the other parties and intervenors shall be allowed an opportunity to respond to the evidence, including, if appropriate, an opportunity to cross-examine the person offering the evidence. Nothing in this subsection shall affect the provisions and requirements of subsection (ii) of this section.

(gg) **Post-Hearing Legal Submissions**

The Board may require or allow the parties and intervenors to file post-hearing briefs and proposed findings of fact and conclusions of law. Any assertions of fact in such briefs and findings should be supported by reference to specific portions of the evidentiary record supporting any such assertion(s).

(hh) **Proposed Final Decisions and Final Decisions**

(1) After the hearing and the filing of any post-hearing legal submissions, the Board shall issue a final decision in accordance with section 4-180 of the Connecticut General Statutes and subparagraph (3)(D) of this subsection authorizing action by the Commissioner, provided that if a designee of the Board conducted the hearing, the designee shall issue a proposed final decision in accordance with section 4-179 of the Connecticut General Statutes; provided further that if the Board has authorized such designee to issue a final decision, he shall issue a final decision in accordance with such section and subparagraph authorizing action by the Commissioner.

(2) At any time after issuance of a proposed final decision but before oral argument held pursuant to subdivision (3) of this subsection, the Board may correct such decision for clerical errors and for errors of fact or law.

(3) (A) Unless otherwise specified by the Board, within fifteen (15) days after personal delivery or mailing of the proposed final decision any party or intervenor may file with the Board exceptions thereto. Exceptions shall state with particularity the party's or intervenor's objections to the proposed final decision, and may not raise legal issues or, subject to subsection (gg) of this section, factual issues which could have been, but were not raised at the hearing. Exceptions may be accompanied by a request for oral argument.

(B) Upon receipt of timely-filed exceptions or on its own initiative, the Board shall send notice to all parties and intervenors of the date by which they may file briefs concerning the proposed final decision. Upon receipt of a timely request for oral argument or on its own initiative, the Board shall schedule oral argument and send notice of the time and place thereof to all shall also specify the date by which the parties and intervenors may file briefs concerning the proposed final decision. Any assertions of fact in briefs filed pursuant to this subparagraph should be supported by reference to specific portions of the evidentiary record. The date for filing briefs or for oral argument shall not be continued at the request of any party or intervenor except upon motion demonstrating that there is good cause for a continuance and that a continuance will not prejudice public health, safety, or welfare or the environment.

(C) Unless the Board rules otherwise, oral argument shall be limited to the issues raised in timely-filed exceptions. The Board may control the oral argument so as to allow all parties and intervenors a reasonable opportunity to present argument.

(D) After the issuance of the proposed final decision, the filing of any exceptions and briefs, and presentation of any oral argument, the Board shall issue a written final decision in accordance with section 4-180 of the Connecticut General Statutes authorizing action by the Commissioner. In its final decision the Board may affirm, modify, or reverse the proposed final decision, in whole or in part, or may remand to the Board for further proceedings, including the taking of further evidence. Any such further proceedings shall be governed by this section. Any final decision by the Board may contain whatever conditions the Board deems appropriate, including but not limited to conditions to be imposed by a license that the Board authorizes the Commissioner to issue to an applicant or to a licensee.

(ii) **Reconsideration**

(1) On motion made or its own initiative, the Board may reconsider, reverse, modify, or correct a final decision in accordance with section 4-181a of the Connecticut General Statutes. In addition, the Board may open a final decision upon a showing that

(A) the final decision was prejudiced by fraud, misrepresentation, or other misconduct of a party or intervenor, or

(B) there is other compelling reason for opening the final decision.

(2) Any further proceedings required by a ruling under subdivision (1) of this subsection shall be conducted in accordance with this section.

parties and intervenors; such notice

(Effective June 2, 1997; amended August 6, 2012)

Sec. 22a-133v-8. Miscellaneous provisions

Nothing in these Regulations shall limit or affect the authority of the Commissioner or the Board under any other statute or regulation.

(Effective June 2, 1997)

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Reporting of nuclear incidents 22a-135-1

Reporting of Nuclear Incidents

Sec. 22a-135-1. Reporting of nuclear incidents

Each operator of a nuclear power generating facility shall notify the Commissioner of Environmental Protection or his designee, which may be another State Agency, as soon as possible but in all cases within one hour, by telephone, of the occurrence of significant events as defined in the Code of Federal Regulations, Title 10, Part 50, Section 50.72 (10CFR50.72) ''Notification of Significant Events'' as amended and interpreted by the U.S. Nuclear Regulatory Commission (Latest revision on file with the Connecticut Department of Environmental Protection, Hartford, Connecticut).

(Effective October 1, 1982)

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Low-Level Radioactive Waste Management Facility Siting Regulations

Sec. 22a-163f-1. Purpose, scope, and applicability

These regulations set forth the requirements, standards, and application procedures applicable to the grant or denial, amendment, transfer, suspension, revocation, and enforcement of certificates of public safety and necessity by the Connecticut Siting Council required for the siting of low-level radioactive waste management facilities. These regulations are promulgated pursuant to title 22a, chapter 446a of the Connecticut General Statutes. Additional regulations governing procedures to be followed by the Connecticut Siting Council for low-level radioactive waste management facilities proceedings are promulgated pursuant to title 16, chapter 277a, of the Connecticut General Statutes, as amended, and appear in parts 16-50j-1 through 16-50j-59 and 16-50*l*-1 through 16-50*l*-5 of Regulations of Connecticut State Agencies.

(Effective March 7, 1989)

Sec. 22a-163f-2. Definitions

As used in these regulations:

(a) ''Active Part'' means that portion of a low-level radioactive waste management facility where handling, management, storage, treatment, recovery, or disposal of low-level radioactive waste will be, is being, or has in the past been conducted;

(b) ''Certificate'' means the certificate of public safety and necessity required by title 22a, chapter 446a of the Connecticut General Statutes to commence construction or modification of a low-level radioactive waste management facility;

(c) ''Closure and Stabilization'' means those actions that are taken upon completion of operations that prepare the disposal site for custodial care and that assure that the disposal site will remain stable and will not need ongoing active maintenance;

(d) ''Coastal land'' means any lands and waters defined as a coastal area in title 22a, chapter 444 of the Connecticut General Statutes;

(e) ''Construction'' means the fabrication, erection, installation, or excavation of a low-level radioactive waste management facility which does not constitute a modification;

(f) ''Disposal'' means the permanent isolation of low-level radioactive waste pursuant to applicable requirements of the United States Nuclear Regulatory Commission under applicable federal laws, and regulations adopted by the commissioner of environmental protection pursuant to Section 22a-163f of the Connecticut General Statutes;

(g) ''Groundwater'' means subsurface water;

(h) ''Local project review committee'' means the committee which may be established pursuant to Section 22a-163p of the Connecticut General Statutes;

(i) ''Management'' means the storage, treatment, or disposal of low-level radioactive waste'';

(j) ''Modification'' means any change or alteration in the approved design, capacity, process, or operation of a low-level radioactive waste management facility constructed or operating pursuant to Title 22a, Chapter 446a of the Connecticut General Statutes, that the council deems significant. Such change or alteration may include but is not limited to a change or alteration in the volume or composition of low-level radioactive waste managed at such facility. The routine maintenance, repair, or replacement of the individual components at a low-level radioactive waste management facility that is necessary for normal operation or change or alteration at a low-level radioactive waste management facility ordered by a federal or state

official in the exercise of his statutory authority shall not be deemed to be a modification;

(k) ''Neighboring municipality'' means any municipality which: 1) shares a common border with the municipality within which the largest portion of the proposed facility is located; 2) occupies any area within a ten-mile radius of the proposed facility site; or 3) has been determined by the council pursuant to Section 22a-163f-4 of these regulations as the neighboring municipality likely to be most affected by the proposed facility;

(*l*) ''Operator'' means the person or entity responsible for the overall operation of a facility;

(m) ''Permanent council members'' means the membership for proceeding under title 22a, chapter 446a of the Connecticut General Statutes, consisting of the commissioners of health services and public safety or their designees, five members appointed by the governor, and one designee each of the speaker of the house of representatives and the president pro tempore of the senate;

(n) ''Pre-Site Selection Property Appraisal'' means a fair market value appraisal of all property within a two-mile radius of the proposed facility if the facility were not to be located at the proposed site, arranged by the applicant, and conducted by a licensed real estate broker or real estate salesman, as defined by title 20, chapter 392 of the Connecticut General Statutes;

(o) ''Storage'' means the permanent holding of waste for treatment or disposal;

(p) ''Surface water'' means harbors, estuaries, rivers, brooks, watercourses, waterways, lakes, ponds, springs, marshes, drainage systems, tidal waters, and all other surfaces, bodies, or accumulations of waters, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof;

(q) ''Transferee'' means a person or entity who becomes the holder of a certificate after a certificate has been issued for the facility;

(r) ''Treatment'' means any method, technique, or process intended to change the physical, chemical, or biological characteristics or composition of any low-level radioactive waste in order to render such waste safer for permanent disposal;

(s) ''Waste management'' means the storage, treatment, or disposal of low-level radioactive waste.

(Effective March 7, 1989)

Sec. 22a-163f-3. Application procedure

(a) **Who shall apply.**

(1) The owner or operator of a proposed facility subject to the requirement of certification under title 22a, chapter 446a of the Connecticut General Statutes, for the construction or modification of a low-level radioactive waste management facility must apply to the council for a certificate pursuant to the application provisions of Section 22a-163h (a) of the Connecticut General Statutes. When a proposed facility is to be owned by one person but operated by another person, both owner and operator, if known at the time of filing, must sign the application.

(b) **Public notice.** The public notice requirements of Section 22a-163h (f) of the Connecticut General Statutes, shall contain the following sentence: ''The chief elected official of any municipality which wishes to be represented on the council as the most affected neighboring municipality may petition to the council within 20 days of the application for such status in accordance with Section 22a-163 (f)-4 of the Regulations of Connecticut State Agencies. Such public notice shall be served to each neighboring municipality at the time of the application.''

(c) **Completeness review.**

(1) No certificate of public safety and necessity shall be granted to any person until a complete application containing all information required by the council has been filed. The required information shall at a minimum include that listed in Section 22a-163h of the Connecticut General Statutes; all information submitted to the local planning and zoning, planning, zoning, inland wetland, conservation, police, and public health and safety commissions; and information required in these regulations, unless an explanation of irrelevancy is provided for any item omitted from an application. The council will reserve final judgment of an item's relevancy.

(2) As soon as practicable after receipt of an application, the council shall notify the applicant in writing as to the completeness of the application. If an application is deemed incomplete by the council and the applicant fails or refuses to correct any deficiencies in the manner directed and within the time prescribed by the council, the application may be rejected for lack of proper submission.

(3) A determination by the council that an application is complete shall not preclude the council from requiring the applicant to submit additional information subsequently determined to be necessary for a proper and complete evaluation of the proposed low-level radioactive waste management facility.

(Effective March 7, 1989)

Sec. 22a-163f-4. Designation of most affected neighboring municipality

(a) **Petition.** For the purposes of ad hoc representation on the council and on the local project review committee, any municipality may petition the council in writing for consideration as the neighboring municipality likely to be most affected by the proposed facility. Such a petition shall be filed no later than 20 days after an application for a certificate is filed with the council and shall specifically identify the reasons and provide supporting data, if available, why the municipality believes it should be designated as the most affected neighboring municipality.

(b) **Considerations.** No sooner than 20 days and no later than 30 days after receiving an application for a certificate, the permanent members of the council shall determine the neighboring municipality likely to be most affected by the proposed facility. In making its determination, the council may consider any relevant information contained in the application for the certificate and in petitions filed by municipalities pursuant to this section. The council shall, at a minimum, give reasonable consideration to the following information:

(1) Description and location of the proposed facility and proximity to neighboring municipalities;

(2) Air quality and movement, surface and groundwater conditions and movement, and proximity to water company facilities and property;

(3) Human population density in the area of the proposed facility, including neighboring municipalities; and

(4) Traffic data, including transportation routes.

(Effective March 7, 1989)

Sec. 22a-163f-5. Fees and assessments

(a) **Payment.** All application fees required by the council for a certificate of public safety and necessity for a low-level radioactive waste management facility or modification of an existing facility shall be paid to the council at the time such application is filed.

(b) **Fee schedule.** The application fee for a certificate of public safety and necessity for a low-level radioactive waste management facility or an amendment to a

certificate of public safety and necessity of an existing facility as defined in title 22a, chapter 446a of the Connecticut General Statutes, and these regulations shall be 1% of estimated construction cost not including land, but not less than $5,000 and not more than $100,000. The fee for each application for a certificate or amendment of a certificate described in title 22a, chapter 446a of the Connecticut General Statutes, shall be used for the administrative expenses of the council and its staff incurred in processing the application. Assessments of the applicant shall be made during the proceeding, or thereafter, for the expenses of the entire proceeding, and shall be in addition to any fee paid pursuant to this section. The amount of any fees and assessments paid pursuant to this section which are in excess of the actual expenses of the council in reviewing and acting upon the entire application shall be refunded within 180 days after all council obligations regarding the application are resolved.

(c) **Declaratory ruling fee.** The fee for each petition for a declaratory ruling pursuant to Section 16-50j-39 of the Regulations of Connecticut State Agencies shall be $500. In the event that a hearing is held for a petition for declaratory ruling, assessments on applicants shall be made for expenses incurred for and during the entire proceeding and shall be in addition to any fee paid pursuant to this section.

(d) **Declaratory ruling field inspections.** For a petition for a declaratory ruling regarding a low-level radioactive waste management facility, the person or entity submitting such request or petition shall make payment of a fee of $500 to the council for a field inspection. This fee shall be paid within 30 days after the council's inspection and shall be in addition to any other fee paid pursuant to this section.

(e) **Development and Management Plan (D&M) Field Inspections.** Expenses incurred for field inspections in reviewing the D&M plan of a low-level radioactive waste management facility shall be billed quarterly to the applicant.

(Effective March 7, 1989)

Sec. 22a-163f-6. Local project review grant

(a) **Deposit.** Upon the filing of an application with the council, the applicant shall deposit with the council for the local project review committee a grant of $100,000.

(b) **Disbursement.** Upon the filing by the local project review committee established pursuant to Section 22a-163p of the Connecticut General Statutes, of receipts for expenses for technical assistance including environmental, scientific, financial, professional, and legal assistance incurred by such committee for its review of the proposed low-level radioactive waste management facility within the council's proceeding, the council shall reimburse the local project review committee a sum not exceeding that deposited by the applicant pursuant to subsection (a) of this section. Any remaining funds shall be returned to the applicant.

(Effective March 7, 1989)

Sec. 22a-163f-7. Rendering a decision

(a) **Requirements for written decision.**

(1) Within one year of receiving an application, the council shall render its decision upon the record by an affirmative vote of not less than seven council members either granting or denying the application as filed, or granting it upon such terms, limitations, or conditions as the council may deem appropriate. The one year limit may be extended 180 days by agreement of the council and the applicant.

(2) The council shall include with its decision an opinion stating the reasons for its decision. The decision shall include a statement describing the items of negotiation between the applicant and local project review committee which the council has

accepted and incorporated into any approval and those negotiated items it has rejected and the reasons therefore.

(3) The council shall include with its decision copies of the reports on negotiations filed by the applicant and the local project review committee, and the record of any council meeting held with the applicant and committee.

(4) The council shall include with its decision the proportion of the quarterly assessment of the gross receipts that shall be paid by the operator of the facility to the municipality in which the facility is located and to the neighboring municipality most affected by the facility.

(5) The council shall include with its decision a pre-site selection property appraisal of fair market value of all property within a two-mile radius of the facility.

(6) The council shall require that the applicant meet the financial responsibility requirements set forth in Section 22a-163*l* of the Connecticut General Statutes, and in these regulations including submission of a surety bond or other security acceptable to the council in a form and an amount fixed by the council sufficient to pay for the costs of closure and stabilization and postclosure observation and maintenance as specified in regulations adopted by the commissioner of the State Department of Environmental Protection. A trust fund shall be established to be financed by yearly payments by the low-level radioactive waste facility operator. The amount paid into the fund shall be fixed by the council so that at the time of closure the fund shall be sufficient to pay the costs of closure and stabilization and postclosure observation and maintenance. The surety bond or other security may be reduced each year by the amount paid into the trust fund. A trust fund shall be established to pay the costs of monitoring and maintenance during the institutional control period as specified in regulations adopted by the commissioner of the State Department of Environmental Protection. The trust fund is to be financed by yearly payments by the low-level radioactive waste facility operator. The amount paid into the fund yearly shall be fixed by the council so that at the start of the institutional control period the fund shall be sufficient to pay the costs of monitoring and maintenance of the facility during the institutional control period. In case of a proposed land disposal facility, the applicant shall further provide a fund or other security for liability for damage during the institutional control period. The amount of the fund or other security and the manner of financing such fund shall be determined by the council based on the type of facility, the location of the facility, and the kind of waste processed by such facility, so that at the beginning of the institutional control period, the fund or security shall be sufficient to cover the anticipated liability for damages. In the case of a proposed treatment or storage facility, the council may require a trust fund or other security for postclosure liability for damages.

(b) **Considerations for decision.**

(1) In making its decision to grant or deny a certificate, the council shall, consistent with applicable requirements of Sections 4-166 to 185, and title 22a, chapter 446a of the Connecticut General Statutes, consider among other relevant facts and circumstances, the following factors:

(A) The impact of the proposed facility on the municipality and affected geographic area in which it is to be located in terms of public health, safety, and welfare including, but not limited to:

(i) Protection of the public and environment from the risk and impact by accident during management or transportation of low-level radioactive waste;

(ii) Protection of the public and environment from the risk and impact by fires and explosions from improper storage, treatment, or disposal methods;

(iii) Protection of the public and environment from the risk and impact by exposure of persons to low-level radioactive wastes and their degradation products during facility operation and after its operational life;

(iv) Consistency of the proposed facility with local and regional land use plans and regulations and the state conservation and development plan in effect at the time the applicant applies to the commissioner of environmental protection for the environmental licenses, permits, or approvals necessary to construct and operate the facility, and with existing and proposed development in the area affected by the construction and operation of the facility;

(v) Protection of the public and environment from adverse impacts including, but not limited to, adverse economic, health, and environmental impacts by the facility during construction, operation, and after its operational life;

(vi) The protection of the public and environment from the risk and impact by the proposed facility on public and private drinking water supplies and resources; and

(vii) The protection of the public and environment from the risk and impact by the proposed facility on scenic, historic, and recreational areas; wetlands; flood plains; wildlife areas; habitat for endangered species; and other environmentally-sensitive areas.

(B) The population density in the area affected by the construction and operation of the proposed facility and the facility's proximity to residential areas.

(C) The public benefits of the proposed low-level radioactive waste management facility including, but not limited to:

(i) The need for the managed capacity provided by the facility;

(ii) The energy and resource recovery benefits, if any, which would be derived from the facility;

(iii) The economic benefit of the facility to the state and its citizens;

(iv) The capability of the proposed facility to accommodate low-level radioactive waste which would otherwise be disposed of, treated, or managed in a less environmentally suitable site or manner;

(v) Economic incentives and benefits which would accrue to the municipality in which the proposed facility is to be located; and

(vi) Any aspects of the proposed facility which would enhance environmental quality.

(D) The extent to which the location of the facility would minimize the need to transport low-level radioactive wastes long distances.

(E) Whether any other reasonably available management method or site would better protect the public health or safety, or the quality of the environment.

(F) The applicant's and, if known, the operator's financial capabilities, qualifications, and previous experience with low-level radioactive waste management.

(G) Whether the applicant has agreed to implement an environmentally-sound Development and Management plan pursuant to Section 22a-163f-9 of these regulations.

(H) Whether the applicant would comply with the minimum distances between active parts of the facility and other land uses established pursuant to Section 22a-163*l*-1 of these regulations.

(2) The council may give such consideration to other Connecticut state laws, municipal ordinances, and regulations as it shall deem appropriate.

(3) In making its decision as to whether or not to issue a certificate, the council shall in no way be limited by the fact that the applicant may already have acquired

land or an interest therein or any necessary permits, certificates, or orders for the purpose of constructing the facility which is the subject of its application.

(c) **Findings required for the issuance of a certificate.**

The council shall not grant a certificate unless it finds and explains:

(1) That there is a public need for the facility;

(2) The nature of the probable environmental impact of the facility, including but not limited to impacts resulting from the construction or operation of the facility, transportation to or management of wastes in, and closure and stabilization, postclosure observation and maintenance, and institutional control of the facility; and

(3) Every significant single and cumulative adverse effect on and conflict with state and regional policies on the subjects listed below and why such adverse effects or conflicts are not sufficient for denial of the certificate:

(A) The natural environment;

(B) Public health, safety, and welfare;

(C) Ecological balance;

(D) Scenic, historic, and recreational values;

(E) Forests and parks;

(F) Air and water purity including impact on present and future sources of water supply; and

(G) Land use consistency.

(Effective March 7, 1989)

Sec. 22a-163f-8. Transferability of certificates

(a) No certificate may be transferred, except to the custodial agency pursuant to state and federal law, without approval of the permanent council.

(b) Any person desiring to transfer a certificate shall jointly submit with the proposed transferee an application to the council on such forms as may be prescribed from time to time by the permanent council members. Such application shall, at a minimum, include the date on which such transfer was agreed upon by the parties to the transfer, an explanation of the reasons for the proposed transfer, and the same information about the transferee which is required of an applicant for a certificate by Section 22a-163h of the Connecticut General Statutes.

(c) The proposed transferee shall agree, in writing, to comply with the terms, limitations, and conditions contained in the certificate.

(d) The permanent council shall not approve any such transfer if it finds:

(1) That such transfer was contemplated at or prior to the time the certificate was issued and that such fact was not adequately disclosed during the certification proceeding; or

(2) That the transferee lacks the financial, technical, or management capabilities to comply fully with the terms, limitations, or conditions of the certificate.

(Effective March 7, 1989)

Sec. 22a-163f-9. Development and management (D&M) plan

(a) **Purpose.** At the time of the council's decision and order for a certificate or amendment to a certificate, the council may require the preparation of a full or partial D&M plan for any proposed low-level radioactive waste management facility or any modification to a low-level radioactive waste management facility, specifying how facility construction will comply with siting orders issued by the council, where the preparation of such a plan would help to protect the health and safety of Connecticut's citizens and the environmental and economic interests of the state.

(b) **Procedure for preparation.** The D&M plan shall be prepared by the applicant in conjunction with the council's staff.

(c) **Timing of the plan.** The D&M plan, as specified in subsection (d) of this section, shall be submitted in one complete filing to the council and to all parties, but before the commencement of construction. The council shall approve, modify, or deny the D&M plan within 60 days after receipt of such plan.

(d) **Elements of D&M plan.** A D&M plan shall be a precise and complete description of the site and facility approved by the council and shall include, but not be limited to, the following information:

(1) The original application as revised by the applicant during the proceeding showing all additions, deletions, and changes, with page references, to the original proposal;

(2) A separate statement of the proposed methods, equipment, and schedule for construction with descriptions of possible adverse construction impacts and methods of minimizing or mitigating such impacts;

(3) A description of the effects of construction on site characteristics, such as the effects of grading on surface drainage, and the effects of soil removal or compaction upon erosion, permeability, and surface drainage;

(4) A statement of the management and administrative program for the operation of the proposed facility and maintenance of the site; and

(5) The names and qualifications of supervisors assigned to the contruction project.

(e) **Supplemental requirements.**

(1) Notices and reports of construction.

(A) The applicant shall provide the council, in writing, with a minimum of two weeks advance notice of the beginning of:

(i) Clearing, road construction, and site preparation; and

(ii) Construction of each section of the facility.

(B) The applicant shall provide the council in writing with a monthly construction progress report describing:

(i) Proposed changes and deviations from the approved D&M plan;

(ii) Any notices required by and provided to other state agencies; and

(iii) Status of construction.

(C) The council shall review proposed changes and deviations from the approved D&M plan and shall approve, modify, or disapprove the changes within 60 days.

(f) **Final report and approval.**

(1) Within 60 days completion of construction, landscaping, soil stabilization, and operational testing of the facility or each completed section of the facility, the certificate holder shall file with the council a final report which shall include the following information:

(A) Certification by the facility operator and a professional engineer whose selection is subject to council approval that the facility conforms with the specifications and requirements in the D&M plan as approved pursuant to this section;

(B) The date full-time continuous operation and waste management will begin; and

(C) The actual construction cost of the facility, including but not limited to, the costs of site acquisition; site preparation, including erosion control and other measures to mitigate construction impacts; facility construction; landscaping; and soil stabilization.

(2) Within 90 days of receipt of the final report or noticed time of full-time operation of the facility or of each section of the facility if construction is to continue throughout the life of the facility, whichever is later, the council shall review the facility and issue a final approval of completion of the D&M plan, or section thereof, or the council shall make recommendations to the certificate holder indicating what actions or procedures are necessary to conform to the certificate and receive final approval of completion of the D&M plan or section thereof. A letter of completion of the D&M plan shall be issued when the council determines that the facility has been constructed and is being operated in accordance to the certificate.

(Effective March 7, 1989)

Sec. 22a-163f-10. Enforcement by the council

Whenever the council becomes aware of any unauthorized construction or modification of a low-level radioactive waste management facility subject to the requirements of title 22a, chapter 446a of the Connecticut General Statutes or that there has been noncompliance with any terms, limitations, or conditions of a certificate, the council, pursuant to Section 22a-163m of the Connecticut General Statutes, will take appropriate enforcement action. Such action may include issuing a cease and desist order, suspending or revoking a certificate issued by the council upon a showing of cause and after a hearing, or requesting the attorney general to bring an enforcement proceeding in superior court.

(Effective March 7, 1989)

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Low-Level Radioactive Waste Management Facility Siting Regulations

Sec. 22a-163*l*-1. Minimum distance requirements

(a) **Minimum distances.** Unless the applicant makes the demonstration required by subsection (d) of this section, the minimum distances between the following specified components of the proposed facility and other land uses or features shall not be less than the following:

(1) Distance between the active parts of the proposed facility and a security fence to be located around the site to prevent unauthorized access: 100 feet;

(2) Distance between the security fence and all other land uses for the purpose of providing limited access to the proposed facility and a buffer to monitor and obtain information about the ecology, meteorology, climate, hydrology, geology, geochemistry, and seismology of the proposed facility site: 300 feet;

(3) Distance between the active parts of the proposed facility and any water supply well, water supply surface water feature, or aquifer in use or planned as a water supply source except for the wells and surface water supply features of the proposed facility: 400 feet;

(4) Distance between the active parts of the proposed facility and the seasonal high water table: five feet.

(b) **Prohibited Areas.** The active parts of the proposed facility shall not be located in any of the following areas:

(1) The 100-year floodplain;

(2) Coastal areas subject to storm surge;

(3) Areas with slopes greater than 15 percent subject to instability including, but not limited to, the geologic processes of mass wasting, slumping, landsliding, and gully erosion;

(4) Critical habitat areas for federal and state endangered species;

(5) Areas where significant tectonic processes such as faulting, folding, seismic activity, or vulcanism are likely to occur;

(6) State parks and forests and registered historic sites and landmarks; and

(7) Any area that could adversely affect the ability of the site to meet the performance objectives of 10 CFR Part 61, as amended from time to time.

(c) **Additional information.** The applicant shall identify in its application all existing and presently planned schools, hospitals, nursing homes, and occupied dwellings within two miles of all active parts of the proposed facility. The applicant shall demonstrate that the health and safety of persons utilizing such structures will not be jeopardized by the siting of the proposed facility and that the release of radioactive material to the general environment shall be maintained as low as reasonably achievable below the limits set forth in 10 CFR Part 61, as amended from time to time, and in no case exceed those levels. If the applicant fails to make the required showing or the council determines that the minimum distances set forth in subsection (a) are inadequate to protect the public health and safety, the council may require distances in excess of such minimum distances.

(d) **Maximum safety demonstration.** If the applicant demonstrates to the council's satisfaction that a distance less than the minimum set forth in subsection (a) will ensure the safety of the public from potential dangers associated with the siting of the facility, then the council may reduce the minimum required distance accordingly, provided, however, that in no event shall concentrations of radioactive material which may be released to the general environment in groundwater, surface

water, air, soil, plants, or animals result in an annual dose exceeding the limits established in 10 CFR Part 61, as amended from time to time.

(e) **Considerations.** In determining whether to require or allow distances which differ from the minimum distances set forth in subsection (a), the council shall consider, among other relevant facts and circumstances, the following factors:

(1) Whether a different distance would provide sufficient separation, including an adequate margin of safety to implement:

(A) Measures to protect the public from the potential effects of migration of low-level radioactive waste from the active part of the facility;

(B) Remedial measures which would prevent escape of such low-level radioactive waste or the effects thereof from the facility; and

(C) Measures to protect the public against the adverse effects of low-level radioactive waste spills, fires, emission of radioactivity, and explosions.

(2) Site specific hydrogeological conditions, such as the rate and direction of ground water flow, surface water flow, and soil permeability;

(3) Localized climatic conditions, such as prevailing wind direction and precipitation; and

(4) Population density within a two-mile radius of the facility; and

(5) Appropriate actions necessary to protect the proposed facility from effects of the 500-year flood event and/or flood of record.

(f) **Minimum land ownership or restrictions.** The minimum distances required by the council pursuant to subsections (a) or (d) shall be maintained on property of the owner of the low-level radioactive waste management facility. If the council, pursuant to subsection (c), determines that additional distances are required, it may, as a condition of the certificate, require the applicant to obtain legally enforceable restrictions on adjacent property to preclude the establishment of inconsistent land uses within the minimum distance determined to be necessary by the council. The minimum distances established by this section shall not apply to the facility's entrance and vehicular access route.

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Low-Level Radioactive Waste Management Facility Siting Regulations

Sec. 22a-163t (b)-1. Proportionate quarterly assessments

(a) **Specification of Proportion.** When granting a certificate for a low-level radioactive waste management facility, the council shall specify the proportion of the quarterly assessment of the gross receipts that shall be paid by the operator of the facility to the municipality in which the facility is located and to the neighboring municipality most affected by the facility.

(b) **Decision.** When specifying the proportion of the quarterly assessment of the gross receipts, the council shall base its decision on:

(1) The proportional acreage in each municipality or portion thereof within a two-mile radius of the facility;

(2) The proportional estimated amount of commercial traffic and roadways in each municipality or portion thereof that would be necessary to access the facility; and

(3) The cost of mitigation measures in each municipality necessary to protect the health, safety, and welfare of the general public.

(Effective March 7, 1989)

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Low-Level Radioactive Waste Management Facility Siting Regulations

Sec. 22a-163t (e)-1. Pre-site selection property appraisal

(a) **Appraisal.** When an application is filed with the council, the applicant shall, by certified mail, notify each property owner within a two-mile radius of the proposed facility of the pre-site selection property appraisal of fair market value of the property, determined pursuant to Section 22a-163t (e) (4) of the Connecticut General Statutes.

(b) **Negotiation.** If the pre-site selection property appraisal is disputed by the property owner, the property owner may negotiate directly with the applicant, operator, or certificate holder for a change. If not disputed within 60 days, the appraisal shall be deemed a fair and accurate appraisal.

(c) **Submittal to Council.** Within six months after applying for a certificate from the council, the applicant shall submit to the Council all pre-site selection property appraisals of fair market value and property value disputes that have not been resolved.

(d) **Disputes.** When making a decision on the application for a certificate, the council shall be the final arbitrator of all property appraisal disputes and issue final pre-site selection property appraisals of fair market values for all properties within a two-mile radius of the facility.

(e) **Decision.** The council shall base its decision on:

(1) The appraisals arranged by the applicant;

(2) The claims and contentions of the property owners;

(3) Any appraisals provided by the property owners;

(4) The municipal property assessments; and

(5) If necessary, a professional appraisal of every disputed property, arranged by the council and paid for by the applicant.

(Effective March 7, 1989)

Sec. 22a-163t (e)-2. Good faith effort to obtain fair price

(a) **Good Faith Effort.** For the purposes of Section 22a-163t (e) (4) of the Connecticut General Statutes, if any owner of property within a two-mile radius of the facility offers to sell property after the selection of the site, but before five years after the facility begins operation, a good faith effort to sell shall be the listing of the property by a multiple listing real estate agency for a period of 90 or more days with at least 12 daily advertisements in a newspaper having a general circulation in the municipality at a price at least equal to the pre-site selection property appraisal made pursuant to Section 22a-163t (e)-1 (a) of these regulations, provided no offer is accepted which is less than the pre-site selection property appraisal made pursuant to Section 22a-163t (e)-1 (a) of these regulations. If the property is not sold after the listing period of 90 days, all offers shall be disclosed to the applicant, certificate holder, or operator of the facility. Thirty days after such disclosure, or, if the good faith of the effort is disputed, 30 days after the council rules a good faith effort has been made, the owner may accept the highest reasonable offer made by any person, including the applicant, certificate holder, or operator of the facility. If the owner chooses to sell the property for less than the highest bid, for the purpose of Section 22a-163t (e) (4) of the Connecticut General Statutes, the difference paid to the owner shall be that between the pre-site selection property appraisal and the highest bid received excluding a bid from the applicant, certificate holder, or operator of the facility.

(b) **Disputes.** Any dispute over a good faith effort to obtain a fair price for a property shall be resolved by the council.

(c) **Decision.** The council shall, within 60 days after being presented with a dispute regarding a good faith effort to obtain a fair market price for a property, make a determination whether or not the owner has made a good faith effort. In resolving such a dispute, the council shall consider:

(1) The pre-site selection property appraisal of fair market value of the property as determined pursuant to Section 22a-163t (e)-1 (a) of these regulations;

(2) The price at which the property is being offered;

(3) Action and efforts to obtain a fair price for the property including use of real estate agents and newspaper advertisements; and

(4) The length of time the property has been made available for sale.

(Effective March 7, 1989)

Sec. 22a-163t (e)-3. Expenses for property value determinations

(a) **Filing Fee.** When submitting to the council for determination any disputed appraisal or challenge of an effort to sell property, the applicant, the certificate holder, or the operator of the facility shall submit a filing fee equal to one percent of the total appraised property value, or $2,500, whichever is less. At any time the council may assess the applicant, the certificate holder, or the operator of the facility for additional payment to carry out the provisions of these regulations.

(b) **Expenses.** Within 180 days after rendering a final decision, the council shall issue a final bill to the certificate holder, the applicant, or the operator of the facility necessary to meet the expenses of the council and administer the provisions of these regulations or refund fees and payments made in excess of actual council expenses.

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Abatement of Air Pollution

Sec. 22a-174-1. Definitions

Except as may otherwise be provided, as used in Section 22a-174-1 to 22a-174-200, inclusive, of the Regulations of Connecticut State Agencies, the following definitions apply. Unless otherwise indicated, references to the Code of Federal Regulations mean the Code of Federal Regulations in effect as of March 15, 2002:

(1) ''Act'' means the Federal Clean Air Act, 42 USC Sections 7401 to 7671q and Public Law 101-549.

(2) ''Actual emissions'' has the same meaning as in 40 CFR 51.165(a)(1)(xii)(A) to (E), inclusive.

(3) ''Administrator'' means the Administrator of the United States Environmental Protection Agency.

(4) ''Affected state or states'' means the Commonwealth of Massachusetts, the States of New York, Rhode Island and any other state located within fifty (50) miles of a Connecticut Title V source.

(5) ''Air pollutant'' means dust, fumes, mist, smoke, other particulate matter, vapor, gas, aerosol, odorous substances, or any combination thereof, but does not include: Carbon dioxide, except in accordance with regulations adopted pursuant to sections 22a-174d, 22a-174j, or 22a-200b of the Connecticut General Statutes; the noble gases (helium, neon, argon, krypton, xenon or radon); uncombined water vapor or water droplets; molecular hydrogen expressed as H2; or molecular oxygen expressed as O_2 or nitrogen.

(6) ''Air pollution'' means the presence in the ambient air of one or more air pollutants or any combination thereof in such quantities and of such characteristics and duration as to be, or likely to be, injurious to public welfare or the environment, to the health of human, plant or animal life, or to property, or as unreasonably to interfere with the enjoyment of life and property.

(7) ''Air pollution control equipment'' means any equipment which is designed to reduce emissions of air pollutants from a stationary source.

(8) ''Allowable emissions'' means ''allowable emissions'' as defined in 40 CFR 51.165(a)(1)(xi).

(9) ''Ambient air'' means that portion of the atmosphere, external to buildings, to which the general public has access.

(10) ''AAQS'' or ''Ambient air quality standard'' means any standard which establishes the largest allowable concentration of a specific pollutant in the ambient air of a region or subregion as established by the United States Environmental Protection Agency or by the commissioner and which is listed in section 22a-174-24 of the Regulations of Connecticut State Agencies.

(11) ''Architectural coating'' means a coating used for residential or commercial buildings and their appurtenances, or industrial buildings, or other outdoor structures.

(12) ''ASTM'' means the American Society for Testing and Materials.

(13) ''Attainment'' means that the quality of the ambient air, as determined by the Administrator, meets the Ambient Air Quality Standards for a given air pollutant.

(14) ''Attainment area'' means a geographic area which has been designated by the Administrator as attainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407.

(15) ''Baseline concentration'' means ''baseline concentration'' as defined in 40 CFR 51.166(b)(13)(i) to (ii)(b), inclusive.

(16) ''Best Available Control Technology'' or ''BACT'' means an emission limitation, including a limitation on visible emissions, based upon the maximum degree of reduction for each applicable air pollutant emitted from any proposed stationary source or modification which the commissioner, on a case-by-case basis, determines is achievable in accordance with section 22a-174-3a of the Regulations of Connecticut State Agencies. BACT may include, without limitation, the application of production processes, work practice standards or available methods, systems, and techniques, including fuel cleaning or treatment, the use of clean fuels, or innovative techniques for the control of such air pollutant.

(17) ''Begin actual construction'' means ''begin actual construction'' as defined in 40 CFR 51.165(a)(1)(xv).

(18) ''Biodiesel fuel'' means the liquid fuel composed of mono alkyl esters of long-chain fatty acids derived from vegetable oils or animal fats, which fuel conforms to ASTM D6751-08, Standard Specification for Biodiesel Fuel Blend Stock for Middle Distillate Fuels, or the current active version thereof.

(19) ''Brush'' means shrubs, vegetation or prunings, the diameter of which is not greater than three inches at the widest point.

(20) ''BTU'' means British thermal unit, which is the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit.

(21) ''Carbon dioxide equivalent emissions'' or ''CO_2e'' means an amount of GHGs emitted, computed as follows:

(A) Individually, for each of the six component gases, multiply the mass amount of emissions of the component gas (tons per year) by the gas's associated global warming potential identified in 40 CFR 98, Table A-1 (October 30, 2009); and

(B) Sum each of the six values resulting from the calculation in subparagraph (A) of this subdivision.

(22) ''CAS Number'' means the number given to a compound by the American Chemical Society's Chemical Abstract Service.

(23) ''CFR'' means the Code of Federal Regulations.

(24) ''Combustion efficiency'' means the percentage calculated in accordance with the following formula:

$$CE = [CO_2] / [CO] + [CO_2] (100)$$

where: CE = Combustion efficiency in percent;
CO_2 = Amount of carbon dioxide;
CO = Amount of carbon monoxide; and
CO and CO_2 are both measured in volume units.

(25) ''Commence operation'' means the owner or operator of the stationary source has begun or caused to begin, any activity which has the potential to emit any air pollutant.

(26) ''Commence construction'' means that the owner or operator of the proposed stationary source or proposed modification to a stationary source has all necessary permits or approvals required pursuant to the Act, any regulations adopted thereunder and section 22a-174-1, et seq. of the Regulations of Connecticut State Agencies, and has either:

(A) Begun, or caused to begin, a continuous program of physical on-site construction of the source, subject to the permit issued by the commissioner, without any breaks in such construction of more than eighteen months; or

(B) Entered into binding agreements or contractual obligations to undertake actual construction of the source within a reasonable time, which cannot be canceled or modified without substantial economic loss to the owner or operator.

(27) ''Commissioner'' means the Commissioner of Environmental Protection, or any member of the Department or any local air pollution control official or agency authorized by the commissioner, acting singly or jointly, to whom the commissioner assigns any function arising under the provisions of these regulations.

(28) ''Construction'' means ''construction'' as defined in 40 CFR 51.165 (a)(1)(xviii).

(29) ''CEM'' or ''Continuous emission monitoring'' means a system for continuously measuring the emissions of any pollutant from a stationary source.

(30) ''CERC'' or ''Continuous emissions reduction credit'' means a real, quantifiable, surplus, permanent and enforceable reduction of an air pollutant at a source which is:

(A) Certified by the commissioner through a SIP approved plan; and

(B) Generated over an uninterrupted period of time in increments of one ton of a specified air pollutant.

(31) ''Criteria air pollutant'' means any air pollutant for which an ambient air quality standard has been established by the Administrator in accordance with Section 107 of the Act.

(32) ''Department'' means the Department of Environmental Protection.

(33) ''Dioxin emissions'' means the total emissions of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) converted to the toxic equivalence amount of 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). For the purposes of this definition, the commissioner shall determine the toxic equivalence amount of 2,3,7,8-TCDD by multiplying the concentration of each isomer in the sample by the appropriate Toxic Equivalency Factor (TEF) set forth in Table 1-1 and then adding the products to obtain the total dioxin emissions in the sample.

Table 1-1

FORM OF DIOXIN EMISSIONS	TEF
monochlorodibenzo-p-dioxin	0
dichlorodibenzo-p-dioxin	0
trichlorodibenzo-p-dioxin	0
2,3,7,8-tetrachlorodibenzo-p-dioxin	1.0
Other tetrachlorodibenzo-p-dioxins	0.01
1,2,3,7,8-pentachlorodibenzo-p-dioxin	0.5
other pentachlorodibenzo-p-dioxins	0.005
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	0.04
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	0.04

1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	0.04
other hexachlorodibenzo-p-dioxins	0.0004
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	0.001
other heptachlorodibenzo-p-dioxins	0.00001
octachlorodibenzo-p-dioxin	0
monochlorodibenzofuran	0
dichlorodibenzofuran	0
trichlorodibenzofuran	0
2,3,7,8-tetrachlorodibenzofuran	0.1
other tetrachlorodibenzofurans	0.001
1,2,3,7,8-pentachlorodibenzofuran	0.1
2,3,4,7,8-pentachlorodibenzofuran	0.1
other pentachlorodibenzofurans	0.001
1,2,3,4,7,8-hexachlorodibenzofuran	0.01
1,2,3,6,7,8-hexachlorodibenzofuran	0.01
2,3,4,6,7,8-hexachlorodibenzofuran	0.01
1,2,3,7,8,9-hexachlorodibenzofuran	0.01
other hexachlorodibenzofurans	0.0001
1,2,3,4,6,7,8-heptachlorodibenzofuran	0.001
1,2,3,4,7,8,9-heptachlorodibenzofuran	0.001
other heptachlorodibenzofurans	0.00001
octachlorodibenzofuran	0

(34) ‘‘Discharge point’’ means any stack or area from which a hazardous air pollutant is released into the ambient air.

(35) ‘‘Dispersion technique’’ means ‘‘dispersion technique’’ as defined in 40 CFR 51.100(hh).

(36) ''Distillate oil'' or ''distillate fuel oil'' means any fuel oil of No. 1 or No. 2 grades, as defined by ASTM D396-09, Standard Specification for Fuel Oils, or the current active version thereof.

(37) ''DERC'' or ''Discrete emission reduction credit'' means the real, quantifiable, surplus, permanent, and enforceable reduction of an air pollutant at a source, which is:

(A) Certified by the commissioner through a SIP approved plan; and

(B) Generated during a specified period of time.

(38) ''Emission'' means the release or discharge of an air pollutant into the ambient air from any source.

(39) ''Emission limitation'' and ''Emission standard'' means ''emission limitation'' and ''emission standard'' as defined in 40 CFR 51.100(z).

(40) ''Emission unit'' means ''emission unit'' as defined in 40 CFR 51.165(a)(1)(vii).

(41) ''ERC'' or ''Emission reduction credit'' means real, quantifiable, surplus, permanent, and enforceable reductions of air pollutant emissions from a source, when such reductions are certified by the commissioner through a SIP approved plan and recorded as CERCs or DERCs.

(42) ''Excessive concentration'' means ''excessive concentration'' as defined in 40 CFR 51.000(kk).

(43) ''Federally enforceable'' means ''federally enforceable'' as defined in 40 CFR 51.165(a)(1)(xiv).

(44) ''Flare'' means an apparatus, device, process, or procedure for the burning of flammable gases or vapors at or near the exit of a stack, flue or vent.

(45) ''Fuel-burning equipment'' means any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power.

(46) ''Fugitive dust'' means solid airborne particulate matter emitted from any source other than through a stack.

(47) ''Fugitive emissions'' means fugitive dust or those emissions that cannot reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(48) ''Good engineering practice (GEP) stack height'' means ''good engineering practice (GEP) stack height'' as defined in 40 CFR 51.100(ii).

(49) ''Greenhouse gases'' or ''GHGs'' means the aggregate of the following six component gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_20), sulfur hexafluoride (SF_6), any hydroflourocarbon (HFC) or any perfluorocarbon (PFC).

(50) ''Hazardous air pollutant,'' except as otherwise provided in section 22a-174-3a of the Regulations of Connecticut State Agencies, means a substance listed in section 22a-174-29 of the Regulations of Connecticut State Agencies.

(51) ''Hazard limiting value'' or ''HLV'' means the highest acceptable concentration of a hazardous air pollutant in the ambient air, pursuant to section 22a-174-29 of the Regulations of Connecticut State Agencies. The primary use of this term is in the derivation of the maximum allowable stack concentration for a source.

(52) ''Heat input'' means the total gross calorific value of all fuels burned, measured in BTU by ASTM Method D2015-66, D240-64, or D1826-64, using the highest heating value of each fuel.

(53) ''Incinerator'' means any device, apparatus, equipment, slab, or structure used for destroying, reducing, or salvaging, by fire or heat, any material or substance including, but not limited to, refuse, rubbish, garbage, trade waste, debris or scrap;

or facilities for cremating human or animal remains provided that, for the purposes of this definition, sources primarily combusting the following used oil types are not incinerators:

(A) Used oil meeting the specifications of 40 CFR 279.11; or

(B) Used oil burned in space heaters meeting the requirements of 40 CFR 279.23.

(54) ''Indian governing body'' has the same meaning as in 40 CFR 51.166(b)(28).

(55) ''Indian reservation'' means ''Indian reservation'' as defined in 40 CFR 51.166(b)(27).

(56) ''Indirect source'' means any building, structure, facility installation, or combination thereof, that has or leads to associated activity as a result of which an air pollutant is or may be emitted. Indirect sources include, but are not limited to: shopping centers, sports complexes, drive-in theaters or restaurants, parking lots or garages, residential, commercial, industrial or institutional buildings or developments, amusement parks and other recreational areas, highways, and airports.

(57) ''Indirect source construction permit'' means a permit issued by the commissioner authorizing the construction of an indirect source.

(58) ''Innovative control technology'' means ''innovative control technology'' as defined in 40 CFR 51.166 (b)(19).

(59) ''Internal offset'' means any federally enforceable reduction of actual emissions from one or more stationary sources on the same premises which are used to offset potential emissions increases from a proposed stationary source on such premises in accordance with the provisions of section 22a-174-3a(*l*) of the Regulations of Connecticut State Agencies.

(60) ''LAER'' or ''Lowest Achievable Emission Rate'' means ''lowest achievable emission rate'' as defined in 40 CFR 51.165(a)(1)(xiii).

(61) ''Major modification'' means ''major modification'' as defined in 40 CFR 51.165(a)(1)(v), provided that, for the purposes of this definition, the term ''significant'' has the same meaning as in 40 CFR 51.166(b)(23)(i) and:

(A) The values for nitrogen oxides as an ozone precursor and volatile organic compounds are each twenty-five (25) tons per year, and

(B) Asbestos, beryllium and vinyl chloride are excluded.

(62) ''Major source baseline date'' means January 6, 1975 for particulate matter and sulfur dioxide and February 8, 1988 for nitrogen dioxide.

(63) ''Major stationary source'' means ''major stationary source'' as defined in 40 CFR 51.165(a)(1)(iv), provided that:

(A) A stationary source that emits or has the potential to emit twenty-five (25) tons per year of volatile organic compounds or nitrogen oxides as an ozone precursor in any severe ozone nonattainment area is a ''major stationary source;'' and

(B) A stationary source that emits or has the potential to emit fifty (50) tons per year of volatile organic compounds or nitrogen oxides as an ozone precursor in any serious ozone nonattainment area is a ''major stationary source.''

(64) ''Malfunction'' means ''malfunction'' as defined in 40 CFR 60.2.

(65) ''MACT'' or ''Maximum achievable control technology'' means a method of achieving an emission limitation or reducing the emission of hazardous air pollutants as determined by the commissioner pursuant to section 22a-174-33(e) of the Regulations of Connecticut State Agencies or by the Administrator pursuant to 40 CFR 63.

(66) ''Maximum allowable stack concentration'' or ''MASC'' is the maximum allowable concentration of a hazardous air pollutant in the exhaust gas stream at the discharge point of a stationary source under actual operating conditions.

(67) ''Maximum capacity'' means the design maximum hourly capacity of a stationary source or highest demonstrated hourly capacity of a stationary source, whichever is greater, multiplied by 365 days per year and 24 hours per day, or some other time period as may be accepted by the commissioner.

(68) ''Maximum uncontrolled emissions'' means the rate of emissions for a source, determined without the application of air pollution control equipment unless the source is incapable of being operated without the air pollution control equipment, of a particular air pollutant where such rate is calculated using:

(A) The maximum capacity of the source unless the commissioner determines that the source is physically unable to operate at that capacity or unless the maximum capacity is limited by restrictions on production rates, hours of operation, or types of materials processed, stored or combusted either through permit conditions or other order of the commissioner; and

(B) Information from the Compilation of Air Pollutant Emission Factors (AP-42) published by the U. S. Environmental Protection Agency, relevant source test data or other information deemed more representative by the commissioner.

(69) ''Minor permit modification'' means a change to a permit that is required for the permittee to lawfully engage in any of the activities or proposed activities at a stationary source as identified in section 22a-174-2a(e) of the Regulations of Connecticut State Agencies.

(70) ''Minor source'' means any stationary source which emits, and has the potential to emit, pollutants at rates or in amounts lower than those specified in subdivision (63) of this section.

(71) ''Minor source baseline date'' means June 7, 1988 for particulate matter, December 17, 1984 for sulfur dioxide and June 7, 1988 for nitrogen dioxide.

(72) ''Mobile source'' means a source designed or constructed to move from one location to another during normal operation except portable equipment and includes, but is not limited to, automobiles, buses, trucks, tractors, earth moving equipment, hoists, cranes, aircraft, locomotives operating on rails, vessels for transportation on water, lawnmowers, and other small home appliances.

(73) ''Modification'' or ''modified source'' means with respect to a stationary source, any physical change or change in the method of operation that would result in an exceedance of the allowable emissions of any individual air pollutant, any increase in the maximum capacity, or any potential emissions of any individual air pollutant not previously emitted, except that:

(A) Routine maintenance, repair or replacement at a stationary source shall not be considered a physical change; and

(B) The following shall not be considered a change in the method of operation:

(i) any increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility and such increase does not cause or allow an exceedance of the rates or emission limits authorized by a permit, order, or judgment for such a source, or

(ii) any increase in hours of operation and such increase does not cause or allow an exceedance of the rates or emissions limits authorized by a permit, order, or judgment for such source.

(74) ''Monitoring'' means any action or procedure that is used to determine actual emissions from a stationary source or compliance with the requirements of any permit, order, statute or regulation.

(75) ''Net emissions increase'' means ''net emissions increase'' as defined in 40 CFR 51.165 (a)(1)(vi) provided that:

(A) For the purposes of this definition, the phrase ''this section'' found in 40 CFR 51.165(a)(1)(vi)(C)(2) refers to sections 22a-174-3a(k) and (*l*) of the Regulations of Connecticut State Agencies, and

(B) Any increases or decreases in actual emissions at a stationary source are creditable only if such increases or decreases occurred within the previous five (5) years of the present modification.

(76) ''Nitrogen oxides'' or ''NO_x'' means the sum of all oxides of nitrogen, expressed as nitrogen dioxide.

(77) ''Non-attainment'' means that the quality of the ambient air, as measured by the commissioner, fails to meet any Ambient Air Quality Standard for a given pollutant for which such standards have been established by the United States Environmental Protection Agency.

(78) ''Non-attainment air pollutant'' means the particular air pollutant for which an area is designated as a non-attainment area, except that volatile organic compounds and nitrogen oxides are non-attainment air pollutants for ozone non-attainment areas.

(79) ''Non-attainment area'' means a geographic area which has been designated as nonattainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407 (section 107 of the Act).

(80) ''Non-minor permit modification'' means a change to a permit that is required for the permittee to lawfully engage in any of the activities or proposed activities at a stationary source as identified in section 22a-174-2a(d) of the Regulations of Connecticut State Agencies.

(81) ''Offset fill pipe'' means a fill pipe that has bends or angles such that a straight sleeve cannot be installed.

(82) ''Opacity'' means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

(83) ''Open burning'' means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through a stack or flue.

(84) ''Operator'' means the person or persons who are legally responsible for the operation of a source of air pollution.

(85) ''Organic compounds'' means any chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

(86) ''Particulate matter'' or ''PM'' means any material, except water in uncombined form, that is or has been airborne and exists as a liquid or a solid in the ambient air.

(87) ''PM 2.5'' means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method set forth in 40 CFR 50, Appendix L, and designated as a reference method in accordance with 40 CFR 53 or by an equivalent method approved by the Administrator in accordance with 40 CFR 53.

(88) ''PM 10'' means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method set forth in 40 CFR 50, Appendix M, and designated as a reference method in accordance with 40 CFR 53 or by an equivalent method approved by the Administrator in accordance with 40 CFR 53.

(89) ''Permit'' means any license issued pursuant to Chapter 446c of the Connecticut General Statutes.

(90) ''Person'' means ''person'' as defined in section 22a-170 of the Connecticut General Statutes.

(91) ''Potential emissions'' or ''potential to emit'' means the maximum capacity of a stationary source, including all physical and operational limitations, to emit any air pollutant, including fugitive emissions to the extent quantifiable, provided that:

(A) Any physical limitation on such capacity, not including air pollution control equipment, shall be treated as part of the stationary source as determined by the commissioner or Administrator; and

(B) Any operational limitation on such capacity, including air pollution control equipment, or a restriction on the hours of operation or on the type or amount of material processed, stored or combusted, shall be treated as part of the stationary source if the limitation or restriction is practicably enforceable.

(92) ''Practicably enforceable'' means:

(A) Any federally enforceable emission limitation or restriction on potential emissions; or

(B) Any emission limitation or restriction on the potential emissions set forth in a permit, order, regulation or statute issued or administered by the commissioner, provided such emission limitation or operational restriction:

(i) identifies the subject stationary source or category of stationary source,

(ii) specifies an emission limitation using a short term emissions rate for such stationary source expressed in pounds per hour, pounds per unit of production or concentration levels sufficient to calculate the actual emissions from such stationary source or specifies an operational restriction for such stationary source such as hours of operation or fuel use restrictions sufficient to calculate the actual emissions from such source,

(iii) specifies appropriate monitoring to determine compliance with such limitation or restriction specified in accordance with subclause (ii) of this subparagraph provided that if a twelve month rolling average is selected, the monitoring shall be CEM or equivalent, and

(iv) if an emission limitation or operational restriction is required to demonstrate that a state or federal standard does not apply, such emission limitation or restriction shall be calculated in accordance with subclause (ii) of this subparagraph and expressed using the shortest technically and economically feasible averaging period, in no case longer than a twelve month rolling average. If a twelve month rolling average is selected, the monitoring shall be CEM or equivalent.

(93) ''Premises'' means the grouping of all stationary sources at any one location and owned or under the control of the same person or persons.

(94) ''Process changes to control air pollution'' means any modification that alters or implements production processes or available methods, including fuel switching, systems, techniques, work practice standards, operational standards or a combination thereof which is designed and implemented for the primary purpose of reducing emissions of air pollutants from a stationary source.

(95) ''Process source'' means any operation, process, or activity except:

(A) The burning of fuel for indirect heating in which the products of combustion do not come in contact with process material;

(B) The burning of refuse; and

(C) The processing of salvageable material by burning.

(96) ''Reasonably Available Control Technology'' or ''RACT'' means the lowest emission limitation that a particular stationary source is capable of meeting by the

application of control technology that is reasonably available considering technological and economic feasibility.

(97) ''Reconstruct'' or ''reconstruction'' means the renovation or re-building of a stationary source in accordance with the provisions of 40 CFR 60.15. A reconstructed stationary source shall be considered a new stationary source. The use of an alternative fuel or raw material by reason of an order in effect pursuant to sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974, or superseding legislation, or by reason of a Natural Gas Curtailment Plan pursuant to the Federal Power Act, or by reason of an order or rule pursuant to section 125 of the Clean Air Act, shall not be considered reconstruction.

(98) ''Region'' means a Connecticut intrastate Air Quality Control Region or the Connecticut portion of an interstate Air Quality Control Region as defined by the EPA in 40 CFR 81.

(99) ''Residual oil'' means any fuel oil of No. 4, No. 5, or No. 6 grades, as defined by ASTM D396-09, Standard Specification for Fuel Oils, or the current active version thereof.

(100) ''Resources recovery facility'' means ''resources recovery facility'' as defined in section 22a-207(9) of the Connecticut General Statutes.

(101) ''Ringelmann chart'' means the chart published and described in the U.S. Bureau of Mines Information Circular 8333.

(102) ''Secondary emissions'' mean ''secondary emissions'' as defined in 40 CFR 51.165(a)(1)(viii).

(103) ''Serious non-attainment area for ozone'' means all towns within the State of Connecticut, except those towns located in the severe non-attainment area for ozone.

(104) ''Severe non-attainment area for ozone'' means the towns of Bethel, Bridgeport, Bridgewater, Brookfield, Danbury, Darien, Easton, Fairfield, Greenwich, Monroe, New Canaan, New Fairfield, New Milford, Newtown, Norwalk, Redding, Ridgefield, Sherman, Stamford, Stratford, Trumbull, Weston, Westport and Wilton.

(105) ''Solid waste'' means unwanted or discarded materials, including solid, liquid, semisolid, or contained gaseous material.

(106) ''Source'' means any property, real or personal, which emits or may emit any air pollutant.

(107) ''Stack'' means ''stack'' as defined in 40 CFR 51.100 (ff), provided that stack shall also include a flare.

(108) ''Standard conditions'' means a dry gas temperature of 68 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute (20 degrees C, 760 mmHg).

(109) ''State'' as used in the phrase ''any other state'' means state, region, territory, commonwealth, military reservation, or Indian reservation.

(110) ''State implementation plan'' or ''SIP'' means a plan required by section 110 of the Act which has been approved by the Administrator.

(111) ''Stationary source'' means ''stationary source'' as defined in 40 CFR 51.165(a)(1)(i) and (ii), provided that any portable emissions unit which is moved from site to site but remains stationary during operation is a stationary source.

(112) ''Stripping facility'' means any stationary source, except air pollution control equipment, the primary purpose of which is to remove organic compounds from water, soil or any other material.

(113) ''Submerged fill pipe'' means any fill pipe the discharge opening of which remains entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

(114) ''Subregion'' means a subdivision of a Region, as determined by the commissioner.

(115) ''Tank'' means any vessel for containing liquids or gases.

(116) ''Title V source'' means ''Title V source'' as defined in 22a-174-33 of the Regulations of Connecticut State Agencies.

(117) ''Throughput'' means the rate, by volume or mass, of production in a manufacturing process, where the combined quantities of all materials introduced into the process, excluding air and water, are used to determine such rate.

(118) ''Total suspended particulate'' means particulate matter as measured by the method described in 40 CFR 50, Appendix B.

(119) ''Unclassifiable area'' means a geographic area which has not been designated either as an attainment area or a non-attainment area pursuant to 40 CFR 81 in accordance with the provisions of section 107 of the Clean Air Act.

(120) ''Volatile organic compound'' or ''VOC'' means ''volatile organic compound'' as defined in 40 CFR 51.100(s), as amended from time to time.

(121) ''Waste water separator'' means any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or another container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

(122) ''Watercourse'' means ''watercourses'' as defined in 22a-38(16) of the Connecticut General Statutes.

(Effective August 23, 1996; amended December 22, 1997, March 15, 2002, April 4, 2006, June 12, 2009, February 1, 2010, January 28, 2011)

Sec. 22a-174-2.

Repealed, March 15, 2002.

Sec. 22a-174-2a. Procedural requirements for new source review and Title V permitting

(a) **Signatory Responsibilities**

(1) Any document, such as a permit application, report or certification, submitted to the commissioner shall be signed by any of the following individuals:

(A) For an individual or sole proprietorship: by the individual or proprietor, respectively;

(B) For a corporation: by any officer in charge of a principal business function, an employee who performs similar policy or decision-making functions, or a duly authorized representative of such officer or employee, provided that such officer, employee or representative is authorized to execute legally binding documents on behalf of such corporation;

(C) For a partnership: by a general partner;

(D) For a municipality: by the ranking elected official or the person authorized as the principal executive officer by charter or resolution of the board of selectmen or town council or other governing body;

(E) For a federal entity: by the principal executive officer, statutorily authorized official, or by a federal employee or any other representative who has received legal delegation of authority. For the purpose of this subsection, a principal executive officer of a federal agency or department includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency or department;

(F) For a state entity: by the statutorily authorized official, ranking elected official or principal executive officer;

(G) For a limited liability company: by any member, manager, officer, employee or a duly authorized representative of the limited liability company provided that such member, manager, officer or employee or representative is authorized to execute legally binding documents on behalf of such limited liability company;

(H) For a limited liability partnership: by any limited partner, officer, employee or a duly authorized representative of the limited liability partnership provided that such limited partner, officer or employee or representative is authorized to execute legally binding documents on behalf of such limited liability partnership; or

(I) For any organization not listed above, the commissioner may require the owner or operator of the source to provide adequate documentation that such person is authorized by such organization to execute and deliver in the name of and on behalf of such organization any document set forth in this subdivision.

(2) For purposes of signing any Title V-related application, document, report or certification required by section 22a-174-33 of the Regulations of Connecticut State Agencies, any corporation's duly authorized representative under subdivision (1)(B) of this subsection may be either a named individual or any individual occupying a named position. Such named individual or individual occupying a named position is a duly authorized representative if such individual is responsible for the overall operation of one or more manufacturing, production or operating facilities subject to section 22a-174-33 of the Regulations of Connecticut State Agencies and either:

(A) The facilities employ more than two-hundred fifty (250) persons or have gross annual sales or expenditures exceeding twenty-five (25) million dollars in second quarter 1980 dollars; or

(B) The delegation of authority to the duly authorized representative has been given in writing by an officer of the corporation in accordance with corporate procedures and the following:

(i) Such written authorization specifically authorizes a named individual, or a named position, having responsibility for the overall operation of the Title V premises or activity,

(ii) Such written authorization is submitted to the commissioner and has been approved by the commissioner in advance of such delegation. Such approval does not constitute approval of corporate procedures, and

(iii) If a duly authorized representative is a named individual in an authorization submitted under subclause (ii) of this subparagraph and a different individual is assigned or has assumed the responsibilities of the duly authorized representative, or, if a duly authorized representative is a named position in an authorization submitted under subclause (ii) of this subparagraph and a different named position is assigned or has assumed the duties of the duly authorized representative, a new written authorization shall be submitted to the commissioner prior to or together with the submission of any application, document, report or certification signed by such representative.

(3) A permit application or other related document shall be considered insufficient by the commissioner unless the applicant provides all required signatures in accordance with this subsection.

(4) Notwithstanding the requirements of section 22a-3a-5(a)(2) of the Regulations of Connecticut State Agencies, where a permit application, permit or other documentation requires a certification, the appropriate individual as specified in this subsection, and the individual or individuals responsible for actually preparing any document to which the certification applies, shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make

inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate and complete, and each shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.''

(5) An individual having overall responsibility for environmental matters for a Title V source shall not sign Title V permit applications or Title V associated reports or certifications unless such individual has responsibility for the overall operation of the Title V source.

(b) **Public Notice**

(1) When proposing to issue a general permit, the commissioner shall comply with the requirements for notice and opportunity for public comment pursuant to section 22a-174(l)(2) of the Connecticut General Statutes.

(2) With respect to public notice of any application for a permit, other than a general permit, the applicant shall comply with the requirements of section 22a-6g of the Connecticut General Statutes and the following:

(A) The commissioner may require the applicant to publish notice of the application in media that serves the needs of communities and representatives not served by traditional media in addition to a newspaper with substantial circulation in the area in which the source intends to operate, and the commissioner may require the notice to be published in languages other than English; and

(B) In the event the commissioner requires compliance with subparagraph (A) of this subdivision, the applicant shall submit to the commissioner a certified copy of such notice as it appeared in such other media no later than twenty (20) days after the date such notice was published.

(3) With respect to notice of tentative determination for any application for a permit, other than a general permit, the applicant shall comply with the requirements of section 22a-6h of the Connecticut General Statutes. In addition to the requirements of section 22a-6h of the Connecticut General Statutes, such notice shall include the following statement, unless such notice is for a minor permit modification pursuant to subsection (e) of this section, that:

''Interested persons have thirty (30) days from publication of such notice to submit comments in writing to the Department of Environmental Protection, Bureau or Air Management or request a public hearing concerning the commissioner's tentative determination to approve or deny the permit application, in accordance with the section 22a-3a-5(b) of the Regulations of Connecticut State Agencies and section 22a-174-2a(c) of the Regulations of Connecticut State Agencies.''

(4) For any application for a permit or modification thereto, the commissioner may require the applicant to comply with section 22a-6*l* of the Connecticut General Statutes.

(5) For any permit application pursuant to section 22a-174-33 of the Regulations of Connecticut State Agencies, the commissioner shall forward a copy of the notice of tentative determination, published in accordance with subdivision (3) of this subsection, to:

(A) The individuals who request such notice;

(B) The chief elected official of the municipality where the stationary source is or is proposed to be located;

(C) The chief executive officer of the municipality where the source is or is proposed to be located;

(D) The appropriate Connecticut regional planning agency;

(E) Any federally recognized Indian governing body whose lands may be affected by emissions from the subject stationary source. In addition to the notice, a copy of the proposed Title V permit shall be submitted to such federally recognized Indian governing body;

(F) The director of the air pollution control program in any affected state. In addition to the notice, a copy of the proposed Title V permit shall be submitted to such director; and

(G) The regional Administrator of the United States Environmental Protection Agency. In addition to the notice, a copy of the proposed Title V permit shall be submitted to the regional Administrator.

(6) For any permit application pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies for a new major stationary source or a major modification at a major stationary source, the commissioner shall forward a copy of the notice of tentative determination, published in accordance with subdivision (3) of this subsection, to those individuals or entities identified in subparagraphs (A), (B), (C), (E) and (G), of subdivision (5) of this subsection.

(7) For any permit application pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies other than an application for a new major stationary source or a major modification at a major stationary source, the commissioner shall forward a copy of the notice of tentative determination, published in accordance with 40 CFR 51.161, as amended from time to time, to those individuals or entities identified in subparagraphs (A), (B), (C), and (G) of subdivision (5) of this subsection.

(8) For any permit application pursuant to section 22a-174-3a(l) of the Regulations of Connecticut State Agencies, the commissioner shall comply with the public notice requirements set forth in section 22a-174-3a(l)(7) of the Regulations of Connecticut State Agencies.

(9) For any permit application pursuant to section 22a-174-33 of the Regulations of Connecticut State Agencies, the commissioner shall comply with the requirements set forth in section 22a-174-33(n) of the Regulations of Connecticut State Agencies.

(c) **Public Comments and Hearings**

(1) Written comments may be filed by any person within thirty (30) days following the publication of a notice of a tentative determination pursuant to subsection (b)(3) of this section. The commissioner shall maintain a record of all comments made on the subject application. Any comments concerning the issuance of a Title V permit may be accompanied by a request for a public informational hearing, an adjudicatory hearing, or both. Notwithstanding the provisions of section 22a-3a-6 of the Regulations of Connecticut State Agencies, any comments concerning the issuance of a permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies may be accompanied by a request for a public informational hearing.

(2) If the commissioner does not accept the recommendations of any director of the air pollution control program in any affected state or federally recognized Indian governing body with respect to any Title V permit issued pursuant to section 22a-174-33 of the Regulations of Connecticut State Agencies, the commissioner shall inform such director or federally recognized Indian governing body and the Adminis-

trator of the reasons therefore in accordance with the provisions of 40 CFR 70.8(b), as amended from time to time.

(3) Public adjudicative hearings shall be held as provided in section 22a-174(l)(2) of the Connecticut General Statutes, and in accordance with section 22a-3a-6 of the Regulations of Connecticut State Agencies.

(4) If a public adjudicative hearing is held, the commissioner shall publish a notice of such hearing in a newspaper of general circulation in the affected area at least thirty (30) days prior to such hearing.

(5) Following the close of the public adjudicative hearing, the final decision maker shall make a decision. Such decision shall be based on the record of such hearing to approve, deny or conditionally approve the issuance of the permit sought.

(6) Non-Adjudicative Public Informational Hearings. Following receipt of a written material request and prior to the issuance of a subject permit, or order pursuant to section 22a-174-33(d) of Regulations of Connecticut State Agencies, the commissioner shall hold a non-adjudicative public informational hearing on:

(A) An application pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies;

(B) An application pursuant to section 22a-174-33 of the Regulations of Connecticut State Agencies;

(C) An order pursuant to section 22a-174-33(d) of the Regulations of Connecticut State Agencies; and

(D) Following the commissioner's receipt of a written request for a public hearing, the commissioner shall hold such hearing if the permit application is for a new major stationary source or a major modification at a major stationary source, or for any stationary source where the stack height exceeds good engineering practice.

(7) Reserved.

(8) Any notice of hearing pursuant to this subsection shall:

(A) Be published at the applicant's expense in a newspaper of general circulation in the affected area at least thirty (30) days prior to such hearing;

(B) Provide the name of the applicant; the location of the proposed activity; the application number; the type of permit being sought; name, address and phone number for a contact person at the Department;

(C) Provide the name, address and number for the Department's Americans with Disabilities Act coordinator;

(D) Provide the date, time and location of the public hearing; and

(E) Be published in other media and in languages other than English as required by the commissioner.

(9) The commissioner may consider more than one permit application, or order pursuant to section 22a-174-33(d) of Regulations of Connecticut State Agencies, at any hearing pursuant to subdivision (6) of this subsection, provided the notice requirements of subdivision (8) of this subsection have been satisfied. The commissioner shall consider all written comments submitted within the public comment period in the notice including all comments received at the public hearing when making a final decision on the application.

(d) **New Source Review and Title V Non-Minor Permit Modification**

(1) General. Prior to making the change that is the subject of the non-minor permit modification application the owner or operator shall apply for and obtain a non-minor permit modification pursuant to this subsection.

(2) Exemptions. A permittee may conduct an activity described in section 22a-174-3a(a)(2) of the Regulations of Connecticut State Agencies without applying for

and obtaining a new source review non-minor permit modification under this subsection.

(3) Except as provided in subdivision (2) of this subsection, the permittee of any stationary source or emission unit permitted pursuant to section 22a-174-3a or former section 22a-174-3 of the Regulations of Connecticut State Agencies shall apply for and obtain a new source review non-minor permit modification for any stationary source, emission unit, or modification identified in section 22a-174-3a(a)(1) of the Regulations of Connecticut State Agencies.

(4) Notwithstanding the exemptions in subdivision (2) of this subsection, the permittee of any Title V source shall apply for and obtain a Title V non-minor permit modification for any one or more of the following:

(A) To incorporate the requirements of any new source review permit issued to the permittee pursuant to former section 22a-174-3(k) or (*l*) of the Regulations of Connecticut State Agencies or section 22a-174-3a(k) or (*l*) of the Regulations of Connecticut State Agencies;

(B) To change a Title V permit term or condition which had prevented a Title V source from being subject to an otherwise applicable requirement;

(C) To relax the form or type of or any reduction in the frequency of any monitoring, reporting or record keeping required by the Title V permit; or

(D) To incorporate a change to an applicable requirement not otherwise subject to subsections (e) or (f) of this section or not otherwise allowed as an off-permit change pursuant to 40 CFR 70.4(b)(14), as amended from time to time, or as operational flexibility pursuant to 40 CFR 70.4(b)(12), as amended from time to time.

(5) The procedural requirements for all non-minor permit modifications pursuant to subdivisions (3) and (4) of this subsection are as follows:

(A) An application for a non-minor permit modification shall be made on forms prescribed by the commissioner. Such application shall include a description of any proposed changes, a proposed permit, any proposed monitoring procedures, any changes in potential emissions resulting from the proposed changes, and an identification of all regulatory, statutory, or otherwise applicable requirements that would become applicable as a result of such changes;

(B) The permittee shall not deviate from the terms and conditions of the existing permit until and unless the commissioner has modified that permit; and

(C) A non-minor permit modification pursuant to this subsection, shall only be granted, granted with conditions, or denied following public notice and opportunity for public comment and public hearing, in accordance with the procedures set forth in subsections (b) and (c) of this section.

(6) In addition to the procedural requirements provided in subdivision (5) of this subsection, an application for a new source review non-minor permit modification pursuant to subdivision (3) of this subsection shall meet the requirements set forth in section 22a-174-3a(c) and 22a-3a-5 of the Regulations of Connecticut State Agencies.

(7) In addition to the procedural requirements provided in subdivision (5) of this subsection, an application for a Title V non-minor permit modification pursuant to subdivision (4) of this subsection shall meet the requirements set forth in section 22a-174-33(g) and 22a-3a-5 of the Regulations of Connecticut State Agencies and shall:

(A) Meet the requirements of 40 CFR 70.5(c), as amended from time to time;

(B) Meet the requirements of 40 CFR 70.7(a)(1), (4), (5) and (6) as amended from time to time;

(C) Where applicable, meet the requirements of 40 CFR 72 to 78, inclusive, as amended from time to time; and

(D) Only be granted or denied following opportunity for a public informational hearing described in subsection (c)(6) of this section, as may be applicable.

(8) With respect to an application for a Title V non-minor permit modification pursuant to subdivision (4) of this subsection, the commissioner shall:

(A) Take final action on a Title V non-minor permit modification within twelve (12) months from receipt of a complete application. In the event that this deadline is exceeded no application for a Title V non-minor permit modification shall automatically be deemed sufficient or approved; and

(B) Submit the modified Title V permit to the Administrator.

(9) If, pursuant to section 22a-174-3a(f) of the Regulations of Connecticut State Agencies, the commissioner modifies a new source review permit issued pursuant to section 22a-174-3a or former section 22a-174-3 of the Regulations of Connecticut State Agencies, the following procedures shall apply:

(A) The permittee shall not deviate from the terms and conditions of the existing permit until and unless the commissioner has modified that permit; and

(B) A non-minor permit modification pursuant to this subsection, shall only be granted, granted with conditions, or denied following public notice and opportunity for public comment and public hearing, in accordance with the procedures set forth in subsections (b) and (c) of this section.

(e) **New Source Review and Title V Minor Permit Modification**

(1) The permittee of any source that is subject to a new source review permit issued by the commissioner pursuant to section 22a-174-3a or former section 22a-174-3 of the Regulations of Connecticut State Agencies shall apply for a new source review minor permit modification to make any change to such permit, unless such change is allowed pursuant to subsection (f) of this section or unless the change is required to receive a non-minor permit modification pursuant to subsection (d)(3) of this section.

(2) The permittee of any Title V source shall apply for a Title V minor permit modification to incorporate:

(A) Any modification not covered by permit revisions in subsection (f)(2)(A) to (F), inclusive, of this section; and

(B) Any modification allowed pursuant to the Title V minor permit modification criteria pursuant to 40 CFR 70.7 (e)(2)(i)(A)(1) to (6), inclusive, as amended from time to time.

(3) The procedural requirements for all new source review and Title V minor permit modifications, except as otherwise provided in subdivisions (4) and (5) of this subsection, are as follows:

(A) An application for a minor permit modification shall be made on forms prescribed by the commissioner and signed in accordance with subsection (a) of this section;

(B) An application for a minor permit modification shall include the following:

(i) a description of the proposed modification, a proposed modified permit, any proposed monitoring procedures, any increase in potential emissions resulting from the proposed modification, and an identification of all regulatory, statutory, or otherwise applicable requirements that would become applicable as a result of such modification, and

(ii) a statement, certified in accordance with subsection (a)(5) of this section, that the proposed minor permit modification meets all regulatory, statutory, or applicable requirements identified in the subject application;

(C) Subject to limitations specified in subdivision (5)(F) of this subsection, a permittee may implement the modifications proposed in the minor permit modification application no less than twenty-one (21) days after filing a complete application with the commissioner. The permittee shall comply with the terms and conditions of the proposed modified permit and the terms and conditions of the existing permit that are not being modified, until the commissioner issues or denies the proposed modified permit.

(D) The commissioner shall process any minor permit modification, subject to subdivision (1) of this subsection, at a Title V source in accordance with both the Title V and new source review minor modifications provisions in subdivisions (3) to (5), inclusive of this subsection unless otherwise allowed pursuant to subdivision (r)(2) of section 22a-174-33 of the Regulations of Connecticut State Agencies.

(4) With respect to an application for a new source review minor permit modification, under subdivision (1) of this subsection, to a permit issued pursuant to section 22a-174-3a or former section 22a-174-3 of the Regulations of Connecticut State Agencies, the existing permit terms and conditions of the permit sought to be modified remain in full force and effect if the modification that is the subject of the application is determined by the commissioner to require a non-minor permit modification.

(5) The following requirements shall apply to an application for a Title V minor permit modification under subdivision (2) of this subsection:

(A) The application shall meet the requirements of 40 CFR 70.5(c), as amended from time to time, and shall be governed by 40 CFR 72 to 78, inclusive, as amended from time to time;

(B) The application shall include completed forms for the commissioner to use to notify the Administrator, affected states and federally recognized Indian governing bodies of the proposed Title V minor permit modification;

(C) The commissioner shall notify the Administrator, affected states and the federally recognized Indian governing bodies within five (5) business days of receiving an application for a Title V minor permit modification;

(D) The commissioner shall comply with the timetable for issuance set forth in 40 CFR 70.7(e)(2)(iv), as amended from time to time;

(E) The commissioner shall not grant the permit shield provided by section 22a-174-33(k) of the Regulations of Connecticut State Agencies for Title V minor permit modifications made under this subsection;

(F) The permittee shall comply with the existing permit terms and conditions of the Title V permit if:

(i) the permittee fails to comply with the proposed permit terms and conditions during the pendency of an application for a Title V minor permit modification,

(ii) such application is subject to the provisions of subsection (d) of this section and the owner or operator has already implemented or began implementing the proposed modifications,

(iii) the commissioner denies the proposed Title V modified permit,

(iv) the commissioner has made a determination pursuant to 40 CFR 70.7(e)(2)(iv)(C), as amended from time to time, or

(v) the commissioner determines that the proposed modification would make the source subject to section 22a-174-3a of the Regulations of Connecticut State Agencies; and

(6) Notwithstanding the requirements of subsections (b) and (c) of this subsection, the commissioner may modify a Title V permit or new source review permit under this subsection without published notice, public comment, or hearing.

(f) **Permit Revisions**

(1) The owner or operator of a stationary source may perform the activities described in sections 22a-174-3a(a)(2)(A)(i) and (ii) and 22a-174-3a(a)(2)(B) and (C) of the Regulations of Connecticut State Agencies unless otherwise restricted by any provision of such permit or an order of the commissioner.

(2) The permittee of any stationary source for which the commissioner has issued a permit pursuant to 22a-174-33, section 22a-174-3a, or former section 22a-174-3 of the Regulations of Connecticut State Agencies shall apply for and obtain a permit revision, for the purposes of:

(A) Correcting a clerical error;

(B) Revising the address or phone number of any person identified in such permit, or making another revision reflecting a similarly minor administrative change at or concerning the subject source;

(C) Revising the name of the authorized representative of the permittee, provided that a request to change such authorized representative shall be accompanied by written authorization in accordance with subsection (a)(2)(A) to (D), inclusive, of this section;

(D) Requiring more frequent or additional monitoring, record keeping or reporting;

(E) Reflecting a transfer in ownership or operational control of the subject source, in accordance with subsection (g) of this section, provided that:

(i) no other modification of the subject permit is required as a result of such transfer,

(ii) if the subject permit contains a provision for changing ownership or operational control of the subject source, the provision stated in the permit shall be followed provided that such provision is consistent with section 22a-6o of the Connecticut General Statutes, and

(iii) any transfer of the permit required by section 22a-6o of the Connecticut General Statutes has been granted by the commissioner;

(F) Implementing an administrative Title V permit amendment set forth in 40 CFR 70.7(d)(1)(v), as amended from time to time; or

(G) Implementing a fuel conversion described in section 22a-174-3a(a)(2)(A)(iii) or (iv) of the Regulations of Connecticut State Agencies.

(3) Notwithstanding the requirements of subsections (b) and (c) of this section, the commissioner may revise a permit under this subsection without published notice, public comment, or hearing.

(4) Upon submitting to the commissioner a written request for a permit revision under this subsection, a permittee may make changes as set forth in such request.

(5) With respect to a request to revise a Title V permit the commissioner shall comply with the applicable provisions of 40 CFR 70.7 (d)(2) and (3), as amended from time to time

(6) The commissioner shall not grant the permit shield provided by section 22a-174-33(k) of the Regulations of Connecticut State Agencies for permit revisions made under this subsection.

(g) **Permit Transfer**

(1) No person shall act or purport to act under the authority of a permit issued to another person unless such permit has been transferred in accordance with section 22a-6o of the Connecticut General Statutes.

(2) If the permit transferred is a Title V permit, such transfer shall comply with 40 CFR 70.7(d)(1)(iv), as amended from time to time, and proceed under subsection (f)(2)(E) of this section.

(h) **Permit Revocation**

(1) The commissioner may revoke any permit on his own initiative or at the request of the permittee in accordance with sections 4-182(c) and 22a-174c of the Connecticut General Statutes, section 22a-3a-5(d) of the Regulations of Connecticut State Agencies, and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request.

(2) A permittee requesting the revocation of the permittee's Title V permit shall also state the requested date of revocation and provide evidence satisfactory to the commissioner that the subject source is no longer a Title V source.

(3) The Administrator, pursuant to the Act, is authorized to revoke or revoke and reissue a Title V permit if the Administrator has determined that the commissioner failed to act in a timely manner on a permit renewal application.

(i) **Permit Renewal**

(1) In addition to the requirements of section 22a-3a-5(c) of the Regulations of Connecticut State Agencies, except as provided in subdivision (2) of this subsection, the permittee shall apply for a permit renewal, if the subject permit contains an expiration date, at least one hundred twenty (120) days prior to the permit expiration date. Such application shall be made on forms prescribed by the commissioner, and shall include a description of any proposed modifications, proposed permit language, any proposed monitoring procedures, any increases or decreases in potential emissions resulting from any proposed modifications, and an identification of all regulatory, statutory, or otherwise applicable requirements that would become applicable as a result of such proposed modifications.

(2) The owner or operator of a Title V source shall apply for a renewal of a Title V permit no later than twelve (12) months prior to the expiration date of such permit.

(3) Notwithstanding subdivision (1) of this subsection, permits to operate issued after June 1, 1972 and before April 2, 1986 need not be renewed even when there is a expiration date on the permit.

(j) **Registration and Registration Revocation.**

(1) Any registration issued pursuant to former section 22a-174-2 of the Regulations of Connecticut State Agencies is a license as defined in section 4-166 of the Connecticut General Statutes in that it is a registration required by law. Such registration shall remain in full force and effect, unless otherwise determined by the commissioner.

(2) An owner or operator shall comply with any registration issued by the commissioner under former section 22a-174-2 of the Regulations of Connecticut State Agencies unless and until such registration is revoked.

(3) The commissioner may revoke any registration issued pursuant to former section 22a-174-2 of the Regulations of Connecticut State Agencies on his own initiative or at the request of the registrant, in accordance with sections 4-182(c) and 22a-174c of the Connecticut General Statutes, section 22a-3a-5(d) of the Regulations of Connecticut State Agencies and any other applicable law.

(4) A registrant requesting the revocation of a registration issued pursuant to former section 22a-174-2 of the Regulations of Connecticut State Agencies shall make such a request to the commissioner in writing and shall include:

(A) Facts and reasons supporting the request;

(B) The requested date of revocation; and

(C) Evidence satisfactory to the commissioner to demonstrate that:

(i) The subject stationary source has been shut down, removed, dismantled or otherwise rendered inoperable,

(ii) A complete application for an individual permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies has been submitted to the commissioner for review and approval,

(iii) The subject stationary source is operated in accordance with section 22a-174-3b or section 22a-174-3c of the Regulations of Connecticut State Agencies, or

(iv) The subject stationary source does not currently meet any provision requiring that an individual permit be obtained pursuant to section 22a-174-3a(a) of the Regulations of Connecticut State Agencies.

(Adopted effective March 15, 2002; amended July 19, 2005, April 4, 2006)

Sec. 22a-174-3.

Repealed, March 15, 2002.

Sec. 22a-174-3a. Permit to construct and operate stationary sources

(1) Applicability. Prior to beginning actual construction of any stationary source or modification not otherwise exempted in accordance with subdivision (2)(A) to (C) of this subsection, the owner or operator shall apply for and obtain a permit to construct and operate under this section for any:

(A) New major stationary source;

(B) Major modification;

(C) New or reconstructed major source of hazardous air pollutants subject to the provisions of subsection (m) of this section;

(D) New emission unit with potential emissions of fifteen (15) tons or more per year of any individual air pollutant;

(E) Modification to an existing emission unit which increases potential emissions of any individual air pollutant from such unit by fifteen (15) tons or more per year;

(F) Stationary source or modification that becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant;

(G) Incinerator for which construction commenced on or after June 1, 2009, except if such incinerator is used:

(i) for the primary purpose of reducing, controlling or eliminating air pollution, or

(ii) as a solid waste incineration unit subject to an emission guideline issued pursuant to Section 129 of the Act;

(H) New stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO_2e and one hundred (100) tons per year of greenhouse gases;

(I) Major stationary source when such major stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO_2e; or

(J) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO_2e and one hundred (100) tons per year of greenhouse gases, when such stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO_2e.

(2) (2) Exemptions. Notwithstanding the provisions of subdivision (1) of this subsection, the owner or operator of a stationary source or modification may conduct activities listed in subdivision (2)(A), and may construct or operate the sources listed in subdivision (2)(B) and (2)(C) of this section, without a permit under this section:

(A) Any activity that:

(i) adds air pollution control equipment or implements process changes to control air pollution unless the addition or implementation results in an increase in actual emissions of any individual air pollutant of fifteen (15) tons or more per year, or ten (10) tons or more per year of a hazardous air pollutant subject to the provisions of subsection (m) of this section,

(ii) relocates a portable rock crusher which is subject to a permit or exemption letter issued by the commissioner pursuant to former section 22a-174-3 Regulations of Connecticut State Agencies, or which is registered under a general permit for such sources issued by the commissioner pursuant to section 22a-174(*l*) of the Connecticut General Statutes, provided the owner or operator is in compliance with any such permits and provides written notice to the commissioner prior to such relocation,

(iii) constitutes a conversion from fuel oil to natural gas, or in addition to fuel oil, provided such conversion does not increase actual emissions of any individual air pollutant by fifteen (15) tons or more per year, unless such conversion results in reconstruction; or

(iv) constitutes a conversion from residual fuel oil to distillate fuel oil, or in addition to residual fuel oil, provided such conversion does not increase actual emissions of any individual air pollutant by fifteen (15) tons or more per year, unless such conversion results in reconstruction;

(B) Any stationary source that is:

(i) registered under and is in compliance with any new source review general permit to construct and operate a new or existing stationary source,

(ii) a stripping facility used to remove VOC from contaminated groundwater or soil pursuant to an order issued by the commissioner, provided such facility has a control device with VOC removal efficiency of at least ninety-five percent (95%),

(iii) a portable engine or boiler temporarily replacing an existing engine or boiler, provided the replacement units have a combined emission rate equal to or less than the existing units and that the number of days total that any and all such portable engines or boilers may be used does not exceed ninety (90) days in any calendar year,

(iv) in compliance with section 22a-174-3b, section 22a-174-3c or section 22a-174-42 of the Regulations of Connecticut State Agencies, unless otherwise subject to this section pursuant to subdivision (7) of this subsection, or

(v) a ''dispensing facility,'' as defined in section 22a-174-30(a)(3) of the Regulations of Connecticut State Agencies.

(C) Any:

(i) mobile source, or

(ii) non-road engine as defined in 40 CFR Part 89.

(3) In determining the applicability of subsections (k) or (*l*) of this section, the owner or operator may determine the net emissions increase. However, the net emissions increase shall not be used determining the applicability of:

(A) This section to any minor source or modification thereof; or

(B) Subsection (j) of this section.

(4) This section and section 22a-174-2a of the Regulations of Connecticut State Agencies shall apply to any stationary source or modification for which a permit application pursuant to former section 22a-174-3 of the Regulations of Connecticut State Agencies was filed prior to the effective date of this section, and for which a permit has yet to be issued or denied.

(5) Any permit modification or permit revision to a permit issued under this section shall be made as required in, and in accordance with, the provisions of this section and section 22a-174-2a of the Regulations of Connecticut State Agencies.

(6) Pursuant to the de minimis rule under section 182(c)(6) and (f) of the Act, the owner or operator of a major stationary source shall make and keep records of actual VOC and NOx emission increases and decreases at such source, resulting from any physical change in, or change in the method of operation of a stationary source. Such increases shall include emission increases below fifteen (15) tons per year of any individual air pollutant.

(7) To determine if the net emission increase of a modification exceeds the major source threshold levels and is subject to subsection (k) of this section, the owner or operator shall make and keep records of actual emissions increases and decreases including those below fifteen (15) tons per year, over the five (5) consecutive calendar years preceding the completion of construction.

(8) Any permit issued pursuant to former section 22a-174-3 of the Regulations of Connecticut State Agencies shall remain in full force and effect, in accordance with Section 22a-174-2a(i) of the Regulations of Connecticut Agencies, unless otherwise determined by the commissioner.

(b) **Authorized activities prior to permit issuance**

(1) The owner or operator of a stationary source or modification who is required to obtain a permit or non-minor permit modification under the provisions of this section may, prior to obtaining such permit:

(A) Enter into binding agreements or contractual obligations to undertake construction of the proposed stationary source or modification for which a permit is required; and

(B) Begin site clearing activities.

(2) The owner or operator of a stationary source or modification who must obtain a permit or non-minor permit modification under the provisions of this section, shall not begin actual construction before permit issuance. Such construction activities include, but are not limited to, the following activities which are specifically required for construction of the proposed stationary source or modification:

(A) Excavating, blasting, removing rock and soil; or

(B) Installing footings, foundations, retaining walls, or permanent storage structures.

(c) **Applications**

(1) The owner or operator of a stationary source or modification subject to the provisions of this section shall apply for a permit on forms prescribed by the commissioner. All permit applications shall include:

(A) An executive summary and all other information required by section 22a-3a-5 of the Regulations of Connecticut State Agencies. The executive summary shall summarize the information contained in the application;

(B) Background information, including, but not limited to, the address of the premises, the legal name and business address of the applicant and of the applicant's agent for service of process and, if the applicant is not the owner of the subject source, the legal name and business address of such owner and of the owner's agent for service of process, the names and telephone numbers of the plant or site manager and any other individual, such as an engineer or consultant, designated by the owner or operator to answer questions pertaining to such application, including but not limited to, the siting of the subject stationary source or modification;

(C) The premises' site plan, including: a linear scale and north arrow, the plot plans depicting existing and proposed building locations, the legal boundaries of the property, stack locations, location of the subject stationary source or modification on the premises, and a United States Geological Survey topographic quadrangle

map identifying the latitude and longitude of the subject stationary source or modification; and to the extent the commissioner deems it necessary, building dimensions and final grade elevations for all structures located on the premises;

(D) Technical information, including, but not limited to:

(i) descriptions of equipment, processes, air pollution control equipment, stack, fuels, process materials to be used, and process flow diagrams,

(ii) a completed pre-inspection questionnaire, if requested by the commissioner, which describes the equipment, processes and materials used,

(iii) the type, size, and efficiency of control equipment, and

(iv) the date, or proposed date, for commencement of construction of the subject stationary source or modification;

(E) The rate of emissions for individual air pollutants from the subject stationary source or modification. To calculate the rate of emissions, the owner or operator shall use data from one or more of the following, unless the commissioner determines otherwise:

(i) a continuous monitoring system which has been certified by the commissioner, provided that such data may be taken from a source similar to that for which a permit is sought,

(ii) stack testing data, provided such testing was conducted in accordance with protocols preapproved by the commissioner in writing and such test was observed by department staff; and further provided that such data may be taken from a source similar to that for which a permit is sought,

(iii) material balances conducted by an individual with knowledge of the subject process,

(iv) data from the ''Compilation of Air Pollutant Emission Factors (AP-42)'' as published by the Environmental Protection Agency,

(v) a calculation submitted to the commissioner, or

(vi) manufacturer's data submitted to the commissioner;

(F) Pursuant to subsection (j) of this section, proposed best available control technology (BACT) determination, including, but not limited to, an analysis, as required by subsection (j) of this section, of the amount of emission reduction achievable through the use of BACT;

(G) For any stationary source or modification subject to subsection (l) of this section, the proposed lowest achievable emission rate (LAER) determination, including an analysis of the proposed LAER for each air pollutant, as required by subsection (l) of this section. Such analysis shall include the amount of emission reduction achievable through the use of LAER;

(H) For any stationary source or reconstruction subject to subsection (m) of this section, the proposed maximum achievable control technology (MACT) determination, as required by subsection (m) of this section;

(I) If the premises is a major stationary source, for the purposes of determining compliance with subdivisions (a)(6) and (7) of this section, a summary of the potential emissions from the new subject stationary source or modification and actual emissions from existing stationary sources located at the premises over the preceding five (5) consecutive calendar years;

(J) Compliance information pursuant to and required by section 22a-6m of the Connecticut General Statutes;

(K) Certification in accordance with section 22a-174-2a of the Regulations of Connecticut State Agencies; and

(L) All application fees required by law.

(2) The commissioner may require the owner or operator of the subject stationary source or modification to provide such additional information as the commissioner deems necessary.

(d) **Standards for Granting and Renewing a Permit**

(1) The commissioner may impose conditions on any permit or renewal thereof to ensure compliance with the regulations adopted pursuant to section 22a-174 of the Connecticut General Statutes and the Act.

(2) A permit or permit renewal shall not be issued unless the commissioner determines, upon evidence submitted by the owner or operator or otherwise made part of the record, that the owner or operator of the subject stationary source or modification shall comply with the applicable provisions of subdivision (3) of this subsection.

(3) Before issuance of a permit or permit modification, the owner or operator shall demonstrate, to the satisfaction of the commissioner, that, with respect to the construction and operation of the subject stationary source or modification, the owner or operator shall:

(A) Construct and operate such stationary source or modification in accordance with the permit, and operate such stationary source or modification in accordance with all applicable and relevant emission limitations, statutes, regulations, schedules for stack tests, and other order of the commissioner. In the event a conflict exists between the permit and another state or federally enforceable statute, regulation or order of the commissioner, the most stringent provision shall apply;

(B) Operate such stationary source or modification without preventing or interfering with the attainment or maintenance of any applicable ambient air quality standards or any Prevention of Significant Deterioration increments under subsection (k) of this section;

(C) Operate such stationary source or modification without preventing or interfering with the attainment or maintenance of any National Ambient Air Quality Standard in any other state and without interfering with the application of the requirements in any other state's implementation plan, adopted pursuant to section 110 of the Act;

(D) Operate such stationary source or modification in accordance with all applicable emission standards and standards of performance pursuant to 40 CFR Parts 60, 61, and 63, as may be amended from time to time;

(E) Install:

(i) sampling ports of a size, number and location as the commissioner may reasonably require,

(ii) instrumentation to monitor and record emission and other parameter data as the commissioner may require, and

(iii) such other sampling and testing facilities as the commissioner may require;

(F) As the commissioner may require, conduct stack tests at the expense of such owner or operator, in accordance with subsection (e) of this section, and in accordance with permit conditions and methods prescribed by the commissioner. Such stack tests shall demonstrate, to the commissioner's satisfaction, that the requirements of each and every applicable permit or order of the commissioner for such stationary source or modification are being met and that such stationary source or modification complies with the Regulations of Connecticut State Agencies and federal requirements;

(G) Pay all fees required by the Department within forty-five (45) days of receipt of a tentative determination of the commissioner;

(H) Incorporate Best Available Control Technology (BACT), as directed by the commissioner, for greenhouse gases and each air pollutant listed in Table 3a(k)-(*l*) of subsection (k) of this section subject to, and in accordance with, subsection (j) of this section;

(I) Incorporate the lowest achievable emission rate (LAER), as directed by the commissioner, for each air pollutant subject to, and in accordance with, subsection (*l*) of this section;

(J) Incorporate the maximum available control technology (MACT), as directed by the commissioner, for each air pollutant subject to, and in accordance with, subsection (m) of this section;

(K) As required by the commissioner, install monitoring equipment and perform monitoring to demonstrate compliance with any permit provision. Such monitoring may include, but not be limited to, continuous emission monitoring (CEM);

(L) Provide the commissioner with current information regarding air pollutant emissions from such stationary source or modification, and in accordance with the commissioner's request, submit updated and current information regarding air pollutant emissions from any other stationary sources located on the applicable premises;

(M) Comply with any applicable maximum allowable stack concentration or other emission limitation of section 22a-174-29 of the Regulations of Connecticut State Agencies, as may be amended;

(N) Demonstrate that the emission limitation required of such stationary source or modification for the control of any air pollutant shall not be affected by that portion of the stack height of such stationary source or modification that exceeds good engineering practice stack height or by any other dispersion technique;

(O) Comply with an approved operation and maintenance plan submitted pursuant to subsection (c)(2) of this section;

(P) Have completed and submitted, on forms prescribed by the commissioner, a pre- inspection questionnaire, if requested to do so by the commissioner, which describes the equipment, processes and materials used;

(Q) Make the permit available at the subject premises throughout the period that such permit is in effect; and

(R) Comply with the applicable provisions of this section and any other applicable regulations, permits or orders of the commissioner for such stationary source or modification.

(4) An expiration date may be placed within any permit issued pursuant to this section. Any permit issued pursuant to this section or former section 22a-174-3 of the Regulations of Connecticut State Agencies containing an expiration date shall be renewed in accordance with the provisions of section 22a-174-2a(i) of the Regulations of Connecticut State Agencies.

(e) **Emission Testing**

(1) The permit may require that the owner or operator conduct emission (stack) testing to assure compliance with the permit terms and conditions in accordance with this subsection and section 22a-174-5 of the Regulations of Connecticut State Agencies.

(2) Emission tests shall be conducted in a manner acceptable to and approved by the commissioner. The owner or operator shall provide the results of any emission test in a form satisfactory to the commissioner. The commissioner shall have the opportunity to observe all emission tests or the results of any such tests may be disapproved by the commissioner.

(3) Based upon emission test results, the commissioner may modify, revise, or revoke a permit in accordance with subsection (f) of this section.

(f) **Modification, revision, or revocation of a permit**

(1) The commissioner may modify, revise, or revoke a permit in accordance with this section, section 22a-174-2a of the Regulations of Connecticut State Agencies, and sections 4-182 and 22a-174c of the Connecticut General Statutes.

(2) The commissioner shall review and may modify, revise or revoke any permit if the owner or operator:

(A) Has not commenced construction authorized by the permit within eighteen (18) months from the date of issuance, or such other period, as the permit provides, whichever is later;

(B) Has discontinued construction for eighteen (18) months or more after actual construction authorized by the permit has begun; or

(C) Has not commenced operation authorized by the permit within twenty-four (24) months from the completion of construction, or such other period as the permit provides, whichever is later.

(g) **Non-Minor Permit Modifications, Minor Permit Modifications and Permit Revisions**

(1) Any non-minor permit modification to a permit issued pursuant to this section shall be made in accordance with subsections (d)(1), (2), (3), (5) and (6) or subsection (d)(8) of section 22a-174-2a of the Regulations of Connecticut State Agencies, respectively.

(2) Any minor permit modification to a permit issued pursuant to this section shall be made in accordance with subsections (e)(1), (3) and (4) of section 22a-174-2a of the Regulations of Connecticut State Agencies, respectively.

(3) Any revision to a permit issued pursuant to this section shall be made in accordance with section 22a-174-2a(f) of the Regulations of Connecticut State Agencies.

(h) **Duty to Comply**

An owner or operator shall comply with the permit or modification thereto issued by the commissioner under this section.

(i) **Ambient Air Quality Analysis**

(1) An application for a permit subject to this subsection, if requested to be provided pursuant to subsection (c)(2) of this section, shall contain an analysis of the effect of the pollutants listed in Table 3a(i)-(1) below. For the purposes of this subsection, the allowable emissions of an air pollutant will be deemed to have a significant impact on air quality if such impact is greater than or equal to the amount listed for any individual air pollutant in Table 3a(i)-1 below.

Table 3a(i)-1 Ambient Impact

Air Pollutant	Ambient Impact (Micrograms per cubic meter)
PM_{10}	
Annual average	1
24-hour average	5
Sulfur Dioxide	
Annual average	1
24-hour average	5
3-hour average	25

Carbon Monoxide 8-hour average 1-hour average	 500 2000
Nitrogen Dioxide Annual average	 1
Dioxin Annual average (as calculated according to Section 22a-174-1(29) of the Regulations of Connecticut State Agencies) (Polychlorodibenzodioxins (PCDDs)) (Polychlorodibenzofurans (PCDFs))	(Notwithstanding above units) 0.1 picograms/m^3
Lead (Pb) Three (3) month average	0.3

(2) Any person who makes estimates of ambient air quality impacts shall use applicable air quality models, databases or other techniques approved by the commissioner. The commissioner may request any owner or operator to submit an ambient air quality impact analysis using applicable air quality models and modeling protocols approved by the commissioner.

(j) **Best Available Control Technology (BACT)**

(1) An owner or operator shall incorporate BACT for:

(A) Potential emissions of each air pollutant above the significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this section, from each new major stationary source;

(B) Potential emissions of each air pollutant above the significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this section, from each major modification. This requirement applies to each individual emission unit that is being modified as part of such major modification;

(C) Potential emissions of fifteen (15) tons or more per year of any air pollutant, from each new emission unit;

(D) Potential emissions of fifteen (15) tons or more per year of any air pollutant, from a modification to each existing emission unit;

(E) Potential emissions of 75,000 tons or more per year of CO_2e from each new major stationary source;

(F) Potential emissions of 100,000 tons or more per year of CO_2e and potential emissions of one hundred (100) tons or more per year of greenhouse gases from each new stationary source and, from such a source, potential emissions of each air pollutant above the significant emission rate threshold in Table 3a(k)-1 of subsection (k) of this section;

(G) Potential emissions of 75,000 tons or more per year of CO_2e from each physical change or change in the method of operation of a major stationary source;

(H) Potential emissions of 75,000 tons or more per year of CO_2e from each physical change or change in the method of operation of a stationary source, where such stationary source:

(i) Emits or has the potential to emit equal to or greater than 100,000 tons per year CO_2e, and

(ii) Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases; or

(I) Potential emissions of 75,000 tons or more per year of CO_2e and potential emissions of each air pollutant above the significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this section from each physical change or change in the method of operation of a stationary source, where such stationary source:

(i) Emits or has the potential to emit equal to or greater than 100,000 tons per year CO_2e, and

(ii) Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases.

(2) The owner or operator:

(A) Shall make and submit to the commissioner for written approval a BACT analysis for each air pollutant subject to subdivision (1) of this subsection, including but not limited to, secondary and cumulative impacts and cost estimates of all control options, or the use of innovative technology; and

(B) Shall install BACT as approved by the commissioner.

(3) The commissioner's review and written approval regarding BACT or the use of innovative technology shall be conducted prior to the issuance of the permit and prior to beginning actual construction.

(4) Notwithstanding any permit for a new source or modification under this subsection the commissioner may require for construction projects, including phased construction projects, that the permittee resubmit for review and approval a BACT analysis if such construction or phase of construction has not commenced within the eighteen (18) months following the commissioner's approval of the current BACT determination for such construction or phase of construction.

(5) Prior to commencing construction, including each phase of phased construction, the owner or operator may be required by the commissioner to demonstrate the adequacy of the technology used pursuant to any previous BACT determination, if such construction or phase of construction has not commenced within the eighteen (18) months following the commissioner's approval of the current BACT determination for such construction or phase of construction.

(6) In determining whether to approve BACT, the commissioner shall:

(A) Take into account any emission limitation, including any visible emission standard, which is achievable under any permit limitation or any stack test demonstration acceptable to the commissioner;

(B) Consider a previous BACT approval for a similar or a representative type of source;

(C) If the commissioner determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, the commissioner may prescribe a design, equipment, work practice or operational standard, or combination thereof, to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results: and

(D) Not preclude the establishment of an output based emission limitation as BACT provided such application of BACT improves the overall thermal efficiency of the subject source or modification.

(7) In determining whether to approve BACT, the commissioner shall take into account energy, economic and environmental impacts, including secondary and cumulative impacts, and other costs.

(8) In no event shall the application of BACT result in:

(A) Emissions of any pollutant which would exceed the emission allowed by an applicable standard pursuant to 40 CFR Parts 60 and 61, and any State Implementation Plan limitation;

(B) The use of offsetting emission reductions to meet the commissioner's approval of BACT; or

(C) The use of a net emissions increase to meet the commissioner's approval of BACT.

(9) The commissioner may allow the use of innovative technology as BACT, in accordance with 40 CFR 52.21(v), provided that ''Administrator'' means commissioner for the purposes of this provision. The owner or operator shall demonstrate that the proposed innovative technology will comply with 40 CFR 52.21(v), provide a net air quality benefit, and meet at least two (2) of the following criteria:

(A) Improves the process or operation of existing equipment;

(B) Requires the use of new equipment or air pollution control technology;

(C) Reduces localized impacts of any individual air pollutant; or

(D) Implements principles of pollution prevention or environmental management systems.

(k) **Permit Requirements for Attainment Areas: Prevention of Significant Deterioration of Air Quality (PSD) Program**

(1) The provisions of this subsection shall apply to the owner or operator of any new:

(A) Major stationary source for each air pollutant emitted at a level equal to or greater than the threshold designated in Table 3a(k)-1 of this subsection from such new major stationary source located in an attainment area or unclassified area for such pollutant;

(B) Stationary source for greenhouse gases, if the source emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO_2e and one hundred (100) tons per year of greenhouse gases; or

(C) Major stationary source:

(i) For each air pollutant emitted at a level equal to or greater than the threshold designated in Table 3a(k)-1 of this subsection from such new major stationary source located in an attainment area or unclassified area for such pollutant, and

(ii) For greenhouse gases, if the source emits, or has the potential to emit, equal to or greater than 75,000 tons per year of CO_2e.

(2) The provisions of this subsection shall apply to the owner or operator of any:

(A) Major modification for each air pollutant from such major modification located in an attainment area or unclassified area for such pollutant, that has:

(i) Actual emissions that are equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection, and

(ii) A net emissions increase that is equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection;

(B) Major stationary source when such major stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO_2e; or

(C) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO_2e and one hundred (100) tons per year of greenhouse gases, when such stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO_2e.

(3) Notwithstanding subdivisions (1) and (2) of this subsection, the provisions of this subsection do not apply to a major stationary source or major modification with potential emissions of nitrogen oxides of more than twenty-five (25) tons but less than forty (40) tons per year.

(4) The owner or operator of a major stationary source, major modification or stationary source subject to this subsection shall install BACT as approved by the commissioner in accordance with subsection (j) of this section.

(5) Ambient Monitoring

(A) The permit application shall contain an analysis of the effect on ambient air quality in the area of the subject source or modification, of the following pollutants:

(i) those that have allowable emissions in excess of the amount listed in Table 3a(k)-1 of this subsection, or

(ii) those listed in section 22a-174-24 of the Regulations of Connecticut State Agencies,

(B) For any pollutant for which a National Ambient Air Quality Standard does not exist, the analysis shall contain such air quality monitoring data as the commissioner determines is necessary to assess ambient air quality for that pollutant in any area that such pollutant may affect;

(C) For any pollutant (other than nonmethane hydrocarbons) for which a National Ambient Air Quality Standard exists, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of such standard or a Prevention of Significant Deterioration increment listed in Table 3a(k)-2 of this subsection;

(D) The continuous air quality monitoring data that is required by subparagraphs (B) and (C) of this subdivision shall have been gathered over a period of one (1) year and shall represent the year preceding receipt of the application, unless the commissioner determines in writing that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one (1) year, but not to be less than four (4) months;

(E) The owner or operator shall, after construction of the subject source or modification, conduct such ambient monitoring as the commissioner determines is necessary to determine the effect which the emissions from such source or modification may have, or are having, on air quality in any area. In addition, the owner or operator shall submit the results of such ambient monitoring to the commissioner within thirty (30) days of data collection; and

(F) The owner or operator shall meet the requirements of 40 CFR 58, Appendix B during the operation of monitoring.

(6) Source Impact Analysis.

(A) The owner or operator of the subject source or modification which will have an impact on air quality equal to or greater than any amount listed in Table 3a(i)-1 of subsection (i) of this section shall not cause or contribute to air pollution in violation of the National Ambient Air Quality Standards or any applicable maximum allowable increase above baseline concentration established in Table 3a(k)-2 of this subsection;

(B) Compliance with the requirements of this subsection shall be determined using the Department's air emissions inventory and the Prevention of Significant Deterioration increments listed in Table 3a(k)-2 of this subsection;

(C) A permit application for the subject source or modification shall include a calculation of the increase, above the baseline concentration, in ambient concentra-

tions of pollutants to be expected from the new major stationary source or major modification. Such calculation shall be based on:

(i) the allowable emissions from the subject source or modification,

(ii) the actual emissions from all major stationary sources which were required to obtain a permit after the major source baseline date,

(iii) the increased actual emissions from all modifications to the major stationary source which were required to be permitted after the major source baseline date and before the minor source baseline date. The owner or operator shall use allowable emissions instead of actual emissions if such modifications are located on the owner's or operator's premises,

(iv) the actual emissions from all stationary sources, other than major stationary sources, which were required to obtain a permit after the minor source baseline date,

(v) the allowable emissions for any stationary source for which a permit is pending and for which the commissioner has made a determination of application sufficiency, and

(vi) the reductions, occurring on or after the minor source baseline date, in actual emissions and federally enforceable allowable emissions from stationary sources located in the baseline area;

(D) When determining the increase over the baseline concentration of criteria air pollutant emissions from the subject major stationary source or major modification, the commissioner may consider any proposed reductions in actual emissions and allowable emissions which will occur prior to the commencement of operation of the subject major stationary source or major modification, provided such reductions become enforceable.

(7) A permit application for the subject source or modification shall contain an analysis, in accordance with subsection (i) of this section, of the effect of the pollutants listed in Table 3a(k)-1.

Table 3a(k)-1 Significant Emission Rate Thresholds

Air Pollutant	Emission Levels (Tons per Year)
Carbon Monoxide	100
Nitrogen Oxides (as an ozone precursor)	25
Nitrogen Oxides (NOx National Ambient Air Quality Standard)	40
Sulfur Dioxide	40
Particulate Matter	25
PM_{10}	15
Volatile Organic Compounds	25
Hydrogen Sulfide (H~S)	10
Total Reduced Sulfur (including H_2S)	10
Reduced Sulfur Compounds (including H_2S)	10
Sulfuric Acid Mist	7
Fluorides	3
Lead	0.6
Mercury	0.1
Municipal Waste Combustor Organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5×10^{-6}
Municipal Waste Combustor Metals (Measured as particulate matter)	15
Municipal Waste Combustor Acid Gases (Measured as sulfur dioxide and hydrogen chloride)	40

Table 3a(k)-2 Maximum Allowable Increase above Baseline Concentration

Air Pollutant	PSD Increment (ug/m^3)
Particulate Matter, as PM_{10}	
Annual Arithmetic Mean	17
24-Hour Average	30

Sulfur Dioxide	
Annual Arithmetic Mean	20
24-Hour Average	91
3-Hour Average	512
Nitrogen Dioxide	
Annual Arithmetic Mean	25

(8) Additional Source Information.

(A) The owner or operator of the subject source or modification shall include in the application:

(i) an analysis of the impairment to visibility, soils, and vegetation that would result from construction and operation of the subject source or modification, and an analysis of the general commercial, residential, industrial and other associated growth. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or residential value,

(ii) an analysis, based upon methods approved by the commissioner in writing, of the ambient air quality impact projected for the area as a result of the general commercial, residential, industrial, and other growth associated with the subject source or modification,

(iii) a description of the nature, location, design capacity and typical operating schedule of the subject source or modification, including specifications and drawings showing its design and plant layout,

(iv) a schedule for construction of the subject source or modification,

(v) a detailed description as to what system of continuous emission reduction is planned for the subject source or modification, emission estimates, or any other information necessary to demonstrate to the commissioner that BACT will be applied, and

(vi) any other information deemed necessary by the commissioner to perform any analysis or make any determination under this subsection;

(B) Upon the commissioner's request, the owner or operator of the subject source or modification shall submit:

(i) the ambient air quality impact of the subject source or modification, including meteorological and topographical data necessary to estimate such impact, and

(ii) the ambient air quality impacts and the nature and extent of the general commercial, residential, industrial and other growth which have or has occurred since August 7, 1977 in the area the subject source or modification will affect.

(9) Additional Public Participation Requirements. In addition to the public participation requirements of section 22a-174-2a of the Regulations of Connecticut State Agencies:

(A) The commissioner shall include in the notice of tentative determination published pursuant to section 22a-174-2a of the Regulations of Connecticut State Agencies and section 22a-6h of the Connecticut General Statutes, notice of opportunity for public comment at a public hearing, if one is requested, the opportunity to submit written comment, the degree of Prevention of Significant Deterioration increment consumption that is expected if the proposed activity is permitted, and any other information the commissioner deems appropriate; and

(B) The owner or operator of the subject source or modification shall send a copy of the notice required pursuant to subparagraph (A) of this subdivision to those individuals or entities listed under subsection (b)(5), as specified in subsection (b)(6), of section 22a-174-2a of the Regulations of Connecticut State Agencies.

(*l*) **Permit Requirements For Non-attainment Areas**

(1) Applicability. In accordance with subsection (a) of this section, the provisions of this subsection shall apply to the owner or operator of any new major stationary source or major modification which:

(A) Is or will be a major stationary source or major modification for any non-attainment air pollutant if such source is located in a non-attainment area for such air pollutant; or

(B) Is located in an attainment area or unclassifiable area, but the allowable emissions of any air pollutant would cause or exacerbate a violation of a National Ambient Air Quality Standard in an adjacent non-attainment area. Allowable emissions of any such air pollutant will be deemed not to cause or contribute to a violation of a National Ambient Air Quality Standard provided that such emissions result in impacts that are less than levels set forth in Table 3a(i)-1 in subsection (i) of this section.

(2) Analysis of alternatives.

(A) An owner or operator of the subject source or modification shall include an analysis of alternative sites for the proposed activity, alternative sizes for the subject source or modification, alternative production processes, and all environmental control techniques and technologies which are available for such major stationary source or major modification;

(B) Such analysis shall demonstrate whether the benefits of the subject source or modification would significantly outweigh its adverse environmental impacts, including secondary impacts and cumulative impacts, and social costs imposed as a result of the location, construction or modification;

(C) The owner or operator of the subject source or modification shall submit such analysis prior to the issuance of any tentative determination on a permit application under this section.

(3) Control Technology Review and Approval.

(A) An owner or operator of the subject source or modification shall submit, for approval in writing:

(i) a LAER determination for each non-attainment air pollutant for which the subject source is a new major modification or new major stationary source, and

(ii) a LAER determination for each air pollutant which would cause or contribute to a violation of a National Ambient Air Quality Standard in an adjacent non-attainment area.

(B) In determining whether to approve LAER, the commissioner may take into account any emission limitation, including a visible emission limit. The commissioner may disregard any emissions test on a pilot plant or prototype equipment which does not have reasonable operating experience or which may not be generally available for industry use;

(C) In determining whether to approve LAER, the commissioner may take into account an output based emission limitation as LAER provided such application of LAER improves the overall thermal efficiency of the subject source or modification;

(D) The owner or operator of the subject source or modification shall not be granted a permit under this section unless and until the commissioner determines that such owner or operator will install air pollution control technology which complies with the commissioner's approval of LAER for each non-attainment air pollutant;

(E) If the owner or operator of the subject source or modification has made modifications to the subject source or modification and any of these modifications

are subject to but have not previously been evaluated under this subsection, the commissioner shall conduct a LAER review under this subsection and require implementation of LAER for such modifications;

(F) In no event shall the application of LAER result in an emission limit or rate of emissions that is less stringent or environmentally protective than an emission limitation approved by the commissioner as BACT, an emission limitation demonstrated or established in any State Implementation Plan or any applicable limitation or standard pursuant to 40 CFR Parts 60, 61, 62 or 63; and

(G) An owner or operator of the subject source or modification shall submit, for approval in writing an evaluation of secondary impacts or cumulative impacts for each non-attainment air pollutant with potential emissions in excess of the amount listed in Table 3a(k)-1 of subsection (k).

(4) Offsetting emission reductions or Emission Reduction Credits.

(A) Except as provided in subdivision (8)(B) of this subsection, prior to commencing operation pursuant to a permit issued under this section, the owner or operator of the subject source or modification shall:

(i) reduce actual emissions from other stationary sources on such premises, sufficient to offset the allowable emissions increase for each individual non-attainment air pollutant which is the subject of the application, or

(ii) obtain certified emission reduction credits in accordance with subdivision (5) of this subsection, which credits are sufficient to offset the allowable emissions increase for each individual non-attainment air pollutant; and

(B) The commissioner shall not grant a permit to an owner or operator of the subject source or modification unless the owner or operator demonstrates that internal offset or certified emission reduction credits pursuant to subparagraph (A) of this subdivision:

(i) have occurred preceding the submission of such application and prior to the date that the subject source or modification becomes operational and begins to emit any air pollutant. The commissioner may consider a time period beginning no earlier than November 15, 1990,

(ii) are not otherwise required by any of the following: the Act; a federally enforceable permit or order; the State Implementation Plan; or the regulations or statutes in effect when such application is filed,

(iii) will be incorporated into a permit or order of the commissioner and would be federally enforceable,

(iv) will create a net air quality benefit in conjunction with the proposed emissions increase. In determining whether such a net air quality benefit would be created, the commissioner may consider emissions on an hourly, daily, seasonal or annual basis. For carbon monoxide or particulate matter (total suspended particulate and PM_{10}), the net air quality benefits shall be determined by the use of atmospheric modeling procedures approved by the commissioner and the Administrator in writing. Upon the request of the commissioner, the owner or operator shall make and submit to the commissioner, a net air quality benefit determination for each air pollutant. Such determination shall include, but not be limited to, all increases and decreases of emissions from stationary sources at any premises providing the offsetting emission reductions,

(v) shall be based on the pounds per hour of potential emissions increase from the subject source or modification. The commissioner may consider other more representative periods, including, but not limited to, tons per year or pounds per day,

(vi) are identified in an emissions inventory maintained by the commissioner or otherwise approved in writing by the commissioner,

(vii) are of the same non-attainment air pollutant of which the owner or operator proposes to increase. Reductions of any exempt volatile organic compound listed in Table 1-3 of section 22a-174-1 of the Regulations of Connecticut State Agencies or those listed in 40 CFR 51.100 shall not be used to offset proposed increases emissions of non-exempt volatile organic compounds,

(viii) occurred at either: one or more stationary sources in the same non-attainment area or stationary sources in another non-attainment area if, pursuant to the Act, such area has an equal or higher non-attainment classification than the area in which the proposed activity would take place, and if emissions from such other non-attainment area contribute to a violation of a National Ambient Air Quality Standard in the non-attainment area in which the proposed activity would take place,

(ix) for the applicable non-attainment air pollutant, shall be from reductions in actual emissions, and

(x) offset actual emissions at a ratio greater than one to one, as determined by the commissioner. In addition, the owner or operator shall offset emission increases of allowable emissions at a ratio, for volatile organic compounds or nitrogen oxides, of at least: 1.3 to 1 in any severe non-attainment area for ozone, and 1.2 to 1 in any serious non-attainment area for ozone.

(5) The owner or operator of the subject source or modification shall secure certified emission reduction credits before using them. Continuous emission reduction credits shall be secured and retired prior to their use. Emission reduction credits shall be:

(A) Created and used in accordance with 40 CFR 51;

(B) Real, that is, resulting in a reduction of actual emissions, net of any consequential increase in actual emissions resulting from shifting demand. The emission reductions shall be measured, recorded and reported to the commissioner;

(C) Quantifiable, based on either stack testing approved by the commissioner in writing, conducted pursuant to an appropriate, reliable, and replicable protocol approved by the commissioner, or continuous emissions monitoring certified by the commissioner. Such quantification shall be in terms of the rate and total mass amount of non-attainment pollutant emission reduction;

(D) Surplus, not required by any Connecticut General Statute or regulation adopted thereunder, or mandated by the State Implementation Plan, and not currently relied upon for any attainment plan, any Reasonable Further Progress plan or milestone demonstration;

(E) Permanent, in that at the source of the emission reduction, the emission reduction system shall be in place and operating, and an appropriate record keeping system is maintained to collect and record the data required to verify and quantify such emissions reductions; and

(F) Enforceable and approved by the commissioner in writing after the submission to the commissioner of documents satisfactory to the commissioner or incorporated into a permit as a restriction on emissions.

(6) Compliance Requirements.

(A) The owner or operator of the subject source or modification shall demonstrate that all stationary sources owned, operated or controlled by the owner, operator, applicant, permittee and any parent company or subsidiary thereof are in compliance with all environmental protection laws or are on a federally enforceable schedule for achieving such compliance; and

(B) The owner or operator of the subject source or modification shall demonstrate that compliance with any enforcement orders for stationary sources in Connecticut owned, operated or controlled by the owner, operator, applicant, or permittee are on the most expeditious compliance schedule practicable.

(7) Public Notice. The notice of tentative determination pursuant to section 22a-6h of the Connecticut General Statutes shall include any information concerning the proposal by the owner or operator to offset the potential emissions increase from the subject source or modification and the commissioner's approval of LAER.

(8) Notwithstanding any provision of this section:

(A) No permit shall be granted under this subsection if the Administrator has made a final determination that the applicable implementation plan is not being implemented for the nonattainment area in which the subject source or modification is to be located; and

(B) Pursuant to section 173(a)(1)(B) of the Act, the owner or operator of any new major stationary source or major modification which is located in a zone within the non-attainment area, which zone has been identified by the Administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, shall not be required to obtain offsetting emission reductions pursuant to this subsection unless the proposed emissions would cause or contribute to emissions levels which exceed the emissions levels allowed by the State Implementation Plan.

(m) **Permit Requirements for Hazardous Air Pollutants subject to the provisions of section 112(g) of the Act, as may be amended from time to time**

(1) For the purposes of this subsection:

(A) ''Major source of hazardous air pollutants'' means any stationary source that emits or has the potential to emit, ten (10) tons per year or more of any particular hazardous air pollutant or twenty-five (25) tons per year or more of any combination of hazardous air pollutants;

(B) ''Hazardous air pollutant'' or ''HAP'' means, notwithstanding the definition in section 22a-174-1 of the Regulations of Connecticut State Agencies, any air pollutant listed in section 112(b) of the Act, excluding hydrogen sulfide and caprolactam;

(C) ''Construct a major source of hazardous air pollutants'' means to fabricate, erect or install a major source of hazardous air pollutants or group of major sources of hazardous air pollutants within a contiguous area and under common control; and

(D) ''Reconstruct a major source of hazardous air pollutants'' means to replace one or more components at a major source of hazardous air pollutants, provided that:

(i) the fixed capital cost of the new component(s) exceeds fifty (50%) percent of the fixed capital cost of constructing a comparable source, and

(ii) it is technically and economically feasible for the source as determined by the commissioner, if reconstructed as proposed, to meet the applicable MACT emission limitation under this subsection.

(2) The owner or operator of the following sources are exempt from the requirements of this subsection:

(A) A major source of hazardous air pollutants subject to the MACT standards of 40 CFR 63, provided that such owner or operator has met all requirements for preconstruction review and any other applicable requirements of 40 CFR 63, Subpart A;

(B) A major source of hazardous air pollutants de-listed by the Administrator pursuant to section 112(c)(9) of the Act; or

(C) A major source of hazardous air pollutants excluded for research and development activities pursuant to 40 CFR 63.40(f).

(3) An application for a permit to construct, reconstruct, or operate a major source of hazardous air pollutants shall include:

(A) The names of the hazardous air pollutant(s) to be emitted, and the estimated emission rate of each such pollutant;

(B) A proposed determination of MACT, including, but not necessarily limited to, specific design, equipment, work practice, or operational standard, or a combination thereof, that will meet the MACT, technical information on the design, operation, size, and estimated control efficiency of any proposed emission control equipment. The commissioner may require the owner or operator to submit the manufacturer's name, address, telephone number, and design specifications of such equipment for:

(i) each single hazardous air pollutant with potential emissions of ten (10) tons per year or more, and

(ii) any combination of hazardous air pollutants with potential emissions of twenty-five (25) tons per year or more;

(C) A description of the subject source including identification of any listed source category or categories such source is included within pursuant to the Act;

(D) The owner's or operator's proposed dates for:

(i) commencement of construction or reconstruction of such source,

(ii) completion of construction or reconstruction of such source, and

(iii) start-up of such source;

(E) Any federally enforceable emission limitations applicable to such source;

(F) The proposed maximum utilization capacity of such source, and the associated:

(i) uncontrolled emission rates per year, and

(ii) controlled emission rates per year;

(G) A proposed emission limitation for each hazardous air pollutant from such source;

(H) Supporting documentation for the proposed determination of MACT, such as an identification of alternative control technologies and an analysis of the cost, health and environmental impacts and energy requirements; and

(I) Any other relevant information required pursuant to 40 CFR 63, Subpart A, or as the commissioner may require.

(4) No permit will be granted unless the commissioner approves the proposed MACT determinations and determines that the owner or operator shall:

(A) Comply with any applicable emission standards or work practice standards adopted by the Administrator pursuant to sections 112(d) or 112(h) of the Act, respectively; and

(B) Comply with any applicable determination of the commissioner pursuant to section 112(j) of the Act.

(5) In establishing MACT for any major source of hazardous air pollutants, the commissioner shall:

(A) Consider any relevant emission standard or work practice standard proposed by the Administrator pursuant to sections 112(d) or 112(h) of the Act;

(B) Consider any presumptive MACT determination adopted by the Administrator for the applicable source category which includes the source under consideration;

(C) Require the limitation or requirements to be no less stringent than the emission control which is achieved in practice by the best controlled similar source, as determined by the commissioner; and

(D) Require the maximum degree of reduction in emissions of hazardous air pollutants which can be achieved by utilizing those control technologies, taking into consideration the costs of achieving such emission reduction and any health and environmental impacts and energy requirements associated with the emission reduction.

(6) The owner or operator of a source subject to this subsection and the commissioner shall comply with the provisions of 40 CFR Part 63.44 as amended from time to time.

(7) Any permit issued pursuant to this subsection will require the permittee to comply with the applicable emission standard promulgated by the Administrator pursuant to section 112(d) or 112(h) of the Act no later than eight (8) years after such standard is promulgated or eight (8) years after the date by which the permittee was first required to comply with the emission limitation established by such permit, whichever is earlier.

(8) Notwithstanding subdivisions (5), (6) and (7) of this subsection the permittee will not be required to comply with any less stringent provisions of an applicable emission standard promulgated by the Administrator pursuant to section 112(d) or 112(h) of the Act if the level of control required by the emission limitation established by the permit issued pursuant to this subsection is at least as stringent as that required by the applicable emission standard promulgated by the Administrator pursuant to section 112(d) or 112(h) of the Act as determined by the commissioner.

(n) **Permit requirements for mercury emissions from coal-fired electric generating units.**

(1) Definitions. For purposes of this subsection, the following definitions shall apply. Any term not defined in this subsection shall be as defined in 40 CFR 60.24(h)(8), as amended on June 9, 2006:

(A) ''Coal-fired electric generating unit'' means ''electric generating unit'' as defined in 40 CFR 60.24(h)(8).

(B) ''Existing coal-fired electric generating unit'' means any one of the following coal-fired electric generating units: Bridgeport Harbor Station unit 3 in Bridgeport, AES Thames unit 1 in Montville or AES Thames unit 2 in Montville.

(C) ''New coal-fired electric generating unit'' means any coal-fired electric generating unit that is not an existing coal-fired electric generating unit.

(D) ''State mercury mass emissions cap'' means, for the period beginning January 1, 2010 through December 31, 2017, 106 pounds of mercury per calendar year, and, beginning January 1, 2018, 42 pounds of mercury per calendar year.

(2) In addition to the information specified in subsection (c) of this section, the owner or operator of a coal-fired electric generating unit subject to the provisions of this section shall include the components specified in this subdivision in any permit application to construct, reconstruct, modify or operate:

(A) Enforceable requirements to limit the annual emission of gases containing mercury from the commencement of operation on a calendar year basis, including:

(i) Mercury emissions limitations consistent with section 22a-199 of the Connecticut General Statutes,

(ii) A cap (in pounds) for the annual mercury emissions from the coal-fired electric generating unit or units that are the subject of the application, and

(iii) Additional requirements determined by the Commissioner as necessary to comply with the state mercury mass emissions cap;

(B) Provisions that satisfy the designated representative requirements of 40 CFR 60.4110 through 60.4114, as specified in subparagraph (E) of this subdivision;

(C) Provisions that satisfy the testing, monitoring and reporting requirements of section 22a-199(b)(3) and (4) of the Connecticut General Statutes;

(D) As of January 1, 2009, to determine compliance with the emissions limitations of subdivision (2)(A) of this subsection, monitoring, recordkeeping and reporting requirements that satisfy:

(i) 40 CFR 75, with regard to mercury mass emissions, and

(ii) 40 CFR 60.4170 through 60.4176, as specified in subparagraph (E) of this subdivision;

(E) The requirements in 40 CFR 60 referenced in this subdivision shall be applied, as follows:

(i) The term ''Hg budget unit'' as used in 40 CFR 60.4170 through 60.4176 shall be deemed to refer to ''coal-fired electric generating unit,''

(ii) As used in 40 CFR 60.4110 through 60.4114: ''Hg Budget source'' shall be deemed to refer to ''facility that includes one or more coal-fired electric generating units,'' ''Hg Budget unit'' shall be deemed to refer to ''coal-fired electric generating unit,'' ''Hg Budget Trading Program'' shall be deemed to refer to ''section 22a-174-3a(n)(2)(F)'' and ''Hg Budget permit'' shall be deemed to refer to ''permit to construct, reconstruct or operate,'' and

(iii) The provisions concerning ''Hg Allowance Tracking System account,'' ''Hg allowances,'' ''proceeds of transactions involving Hg allowances,'' 40 CFR 60.4102 and 40 CFR 60.4151, when made in 40 CFR 60.4110 through 60.4114, shall not be applicable to coal-fired electric generating units subject to this subsection; and (F) Additional requirements determined by the Commissioner as necessary to determine compliance with the mercury emissions limitations of subdivision (2)(A) of this subsection, including, on and after July 1, 2008, installation and operation of a continuous emissions monitoring system.

(3) No permit for a coal-fired electric generating unit shall be granted pursuant to this section unless the sum of the applicable annual mercury emissions caps of the following units does not exceed the applicable state mercury mass emissions cap:

(A) The unit or units addressed by the permit application(s) under consideration;

(B) Each new coal-fired electric generating unit previously issued a permit under this subsection; and

(C) Each existing coal-fired electric generating unit in the state.

(Adopted effective March 15, 2002; amended January 1, 2005, May 29, 2007, June 12, 2009, January 28, 2011)

Sec. 22a-174-3b. Exemptions from permitting for construction and operation of external combustion units, automotive refinishing operations, emergency engines, nonmetallic mineral processing equipment and surface coating operations

(a) **Definitions.** For the purposes of this section and section 22a-174-3c of the Regulations of Connecticut State Agencies:

(1) ''As applied'' means a coating, including all components such as dilution solvents and reactive constituents, prepared at the time of application to a substrate;

(2) ''Automobile'' means a passenger car, van, motorcycle, truck or any other motorized vehicle for transportation;

(3) ''Automotive refinishing operation'' means the processes performed to apply a new surface to the pre-existing coat or paint on an automobile, automotive component or any other mobile equipment or part thereof, including but not limited to surface preparation, primer application, topcoat application and applicator cleaning;

(4) ''Electrostatic application'' means the application of charged atomized paint droplets by electrostatic attraction;

(5) ''Emergency'' means ''emergency'' as defined in section 22a-174-22 of the Regulations of Connecticut State Agencies;

(6) ''Emergency engine'' means ''emergency engine'' as defined in section 22a-174-22 of the Regulations of Connecticut State Agencies;

(7) ''External combustion unit'' means a device that combusts only natural gas, propane or fuel oil, which is not a stationary internal combustion engine or turbine, and includes, but is not limited to, a boiler, heater, drying oven, curing oven or furnace;

(8) ''Hazardous air pollutant'' means, notwithstanding the definition in section 22a-174-1 of the Regulations of Connecticut State Agencies, any air pollutant listed in Section 112(b) of the Act, excluding hydrogen sulfide and caprolactum;

(9) ''Mobile equipment'' means any non-automotive equipment or apparatus that is operated or is capable of being operated on a roadway, including, but not limited to, truck bodies, truck trailers, buses, mobile cranes, bulldozers and other construction equipment, street cleaners and farm equipment;

(10) ''Nonmetallic mineral'' means ''nonmetallic mineral'' as defined in 40 CFR 60.671;

(11) ''Nonmetallic mineral processing equipment'' means any crusher, grinding mill, screening operation, bucket elevator, belt conveyer, bagging operation, storage bin or other equipment used to crush or grind any nonmetallic mineral at a nonmetallic mineral processing plant;

(12) ''Nonmetallic mineral processing plant'' means ''nonmetallic mineral processing plant'' as defined in 40 CFR 60.671;

(13) ''Pre-existing coat or paint'' means a surface covering or coating applied to an automobile or automotive component at an automotive manufacturing facility or applied to any mobile equipment or part thereof at the point of manufacture;

(14) ''Spray booth'' means a building, a room within a building or a partitioned area within a room housing automatic or manual spray application equipment, that is used to apply coatings;

(15) ''Surface coating operation'' means a process or processes used to apply a layer of material including spray painting, dip coating, roller coating and electrostatic deposition, but exclusive of printing, publishing or packaging operations;

(16) ''Touch up repair'' means the application of automotive topcoat finish materials to cover minor finishing imperfections equal to or less than one inch in diameter;

(17) ''Tune-up'' means to perform maintenance and adjust equipment to proper or required operating condition; and

(18) ''Twelve (12) month rolling aggregate'' means the sum of the total fuel use, actual emissions, coating use, solvent use or actual operating time calculated for each month by adding the current month's fuel use, actual emissions, coating use, solvent use or actual operating time to those of the previous eleven months.

(b) **Applicability.**

(1) The owner or operator of a stationary source that is an external combustion unit, an automotive refinishing operation, a nonmetallic mineral processing equipment, an emergency engine or a surface coating operation may construct and operate such source without obtaining a general permit for such source issued pursuant to section 22a-174 of the Connecticut General Statutes or a permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies if:

(A) The source has potential emissions of fifteen (15) tons or more per year of any individual air pollutant;

(B) The source is not a new major stationary source;

(C) The source is not a newly constructed or reconstructed major source of hazardous air pollutants subject to the requirements of section 22a-174-3a(m) of the Regulations of Connecticut State Agencies; and

(D) The owner or operator complies with all applicable provisions of this section.

(2) The owner or operator of an existing stationary source that is an external combustion unit, an automotive refinishing operation, a nonmetallic mineral processing equipment, an emergency engine or a surface coating operation may modify such source without obtaining a general permit for such source issued pursuant to section 22a-174 of the Connecticut General Statutes or a permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies if:

(A) The modification has increased potential emissions of any individual air pollutant from such source by fifteen (15) tons or more per year;

(B) At the time of modification, the source is not authorized to operate pursuant to an individual permit issued pursuant to section 22a-174-3a or former section 22a-174-3 of the Regulations of Connecticut State Agencies;

(C) The modification is not a major modification to an existing major stationary source; and

(D) The owner or operator complies with all applicable provisions of this section.

(3) The requirements of this section do not apply to those sources operating in compliance with section 22a-174-3c of the Regulations of Connecticut State Agencies.

(4) The owner or operator of an automotive refinishing operation that meets the applicability criteria in subdivision (1) or (2) of this subsection shall comply with the provisions of subsection (d) of this section unless such owner or operator is operating in accordance with one of the following:

(A) A valid general permit issued pursuant to section 22a-174 of the Connecticut General Statutes;

(B) An individual permit issued pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies; or

(C) The provisions of section 22a-174-3c of the Regulations of Connecticut State Agencies.

(c) **External combustion unit.**

(1) The owner or operator of an external combustion unit shall properly maintain equipment and operate such unit in accordance with the following requirements:

(A) Maximum rated heat input shall not exceed the following limitations:

(i) 50 MMBtu/hr for sources burning gaseous fuels,

(ii) 25 MMBtu/hr for sources burning distillate oil or a blend of distillate oil and biodiesel fuel, and

(iii) 15 MMBtu/hr for sources burning residual oil or a blend of residual oil and biodiesel fuel;

(B) Fuel use shall not exceed the following limitations:

(i) natural gas usage shall not exceed 214 million cubic feet in any twelve (12) month rolling aggregate,

(ii) propane usage shall not exceed 1.57 million gallons in any twelve (12) month rolling aggregate,

(iii) distillate oil usage, inclusive of blends of distillate oil and biodiesel fuel, shall not exceed 704,000 gallons in any twelve (12) month rolling aggregate,

(iv) residual oil usage, inclusive of blends of residual oil and biodiesel fuel, shall not exceed 191,000 gallons in any twelve (12) month rolling aggregate, and

(v) use of any combination of the fuels listed in subparagraphs (B)(i) to (B)(iv) of this subdivision shall not result in emissions of any individual air pollutant greater than 15 tons per year in any twelve (12) month rolling aggregate;

(C) Fuel content shall be as follows:

(i) any residual oil, inclusive of blends of residual oil and biodiesel fuel, used shall contain 0.5%, or less, sulfur by weight, dry basis, and

(ii) no fuel oil used shall be blended with waste oil or solvent;

(D) The height of any stack associated with the unit shall be the greater of:

(i) 10 meters, or

(ii) the lesser of 1.3 times the building height or maximum building width; and

(E) A tune-up of the external combustion unit shall be performed on an annual basis.

(2) The owner or operator of an external combustion unit shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of subdivision (1) of this subsection. Information sufficient to make such determinations may include the information specified in subdivision (3) of this subsection. All records made to determine compliance with the requirements of this section shall be:

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five (5) years from the date such record is created.

(3) The owner or operator of an external combustion unit may make and maintain records of the following information, as applicable:

(A) Records of the fuel type and quantity used, in gallons or million cubic feet, for each month and each twelve (12) month rolling aggregate;

(B) If the fuel used is residual oil or a blend of residual oil and biodiesel fuel, records of the sulfur content for each nongaseous fuel shipment received;

(C) If multiple fuels are used, records of the quantity in tons of each criteria pollutant emitted for each month and each twelve (12) month rolling aggregate; and

(D) The date each annual tune-up is performed.

(d) **Automotive refinishing operation.**

(1) Except as provided in subsection (4) of this subsection, the owner or operator of an automotive refinishing operation shall properly maintain equipment and perform such operation in accordance with the following requirements:

(A) The total amount of VOC-containing coatings or solvents used shall not exceed 2,000 gallons in any twelve (12) month rolling aggregate;

(B) Any paint or coating shall be applied by one of the following means:

(i) high volume low pressure spray equipment,

(ii) electrostatic application equipment, or

(iii) any other application method that has a manufacturer's guaranteed transfer efficiency of at least sixty-five percent (65%);

(C) Any application equipment used shall be cleaned using one of the following means:

(i) in a device that remains closed at all times when not in use,

(ii) in a system that discharges unatomized cleaning solvent into a waste container that remains closed when not in use,

(iii) in a vat that allows for disassembly and cleaning of application equipment and that is kept closed when not in use, or

(iv) in a system that atomizes spray into a paint waste container that is fitted with a device designed to capture atomized solvent emissions;

(D) If a spray booth is vented directly to the ambient air, such booth shall contain particulate control equipment that is operated and maintained in good working condition at all times the booth is in use;

(E) New and used coatings and solvents shall be stored in nonabsorbent, non-leaking containers. Such containers shall be kept closed at all times except when the container is being filled or emptied; and

(F) Absorbent applicators, such as cloth and paper, which are moistened with coatings or solvents shall be stored in a closed, nonabsorbent, non-leaking container.

(2) The owner or operator of an automotive refinishing operation shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of subdivision (1) of this subsection. Information sufficient to make such determinations may include the information specified in subdivision (3) of this subsection. All records made to determine compliance with the requirements of this section shall be:

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five (5) years from the date such record is created.

(3) The owner or operator of an automotive refinishing operation may make and maintain records of the following information:

(A) Records of the amount of coating and solvent used, in gallons, for each month and each twelve (12) month rolling aggregate; and

(B) If a paint or coating is applied by other than the methods specified in subdivision (1)(B)(i) or (ii) of this subsection, a record of the manufacturer's guaranteed transfer efficiency.

(4) The following application methods and applications are exempt from the requirements listed in subdivision (1) of this subsection:

(A) The use of airbrush application methods for stenciling, lettering and other identification markings;

(B) The application of coatings sold in non-refillable aerosol containers; and

(C) The application of touch-up repair finish materials.

(e) **Emergency engine.**

(1) The owner or operator of an emergency engine shall properly maintain equipment and operate such engine in accordance with this subsection.

(2) No owner or operator of an emergency engine shall cause or allow such engine to operate except during periods of testing and scheduled maintenance or during an emergency and unless the following conditions are met:

(A) Prior to the effective date of section 22a-174-42 of the Regulations of Connecticut State Agencies, operation of such engine shall not exceed 500 hours during any twelve (12) month rolling aggregate;

(B) Prior to the effective date of section 22a-174-42 of the Regulations of Connecticut State Agencies, any nongaseous fuel consumed by such engine shall not exceed a sulfur content of 0.3% by weight, dry basis;

(C) On and after the effective date of section 22a-174-42 of the Regulations of Connecticut State Agencies, operation of such engine shall not exceed 300 hours during any twelve (12) month rolling aggregate; and

(D) On and after the effective date of section 22a-174-42 of the Regulations of Connecticut State Agencies, any nongaseous fuel consumed by such engine shall not exceed the sulfur content of motor vehicle diesel fuel where ''motor vehicle

diesel fuel'' is defined as in section 22a-174-42 of the Regulations of Connecticut State Agencies.

(3) The owner or operator of an emergency engine shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of subdivision (2) of this subsection. Information sufficient to make such determinations may include the information specified in subdivision (4) of this subsection. All records made to determine compliance with the requirements of this section shall be:

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five (5) years from the date such record is created.

(4) The owner or operator of an emergency engine may make and maintain records of the hours of operation for each month and each twelve (12) month rolling aggregate.

(f) **Nonmetallic mineral processing equipment.**

(1) The owner or operator of nonmetallic mineral processing equipment consisting of one or more internal combustion engines shall properly maintain and operate such equipment in accordance with the following conditions:

(A) If every internal combustion engine that supplies power for the nonmetallic mineral processing equipment has an individual maximum output rating greater than or equal to 600 horsepower, the owner or operator shall:

(i) For all such internal combustion engines in combination, not exceed 67,400 gallons of fuel oil usage in any twelve (12) month rolling aggregate,

(ii) For any fuel oil consumed by such internal combustion engine or engines, not exceed a fuel sulfur content of 0.05% by weight, dry basis, and

(iii) Not use the nonmetallic mineral processing equipment and associated internal combustion engine or engines to result in emissions of any individual air pollutant greater than fifteen (15) tons per year in any twelve (12) month rolling aggregate; or

(B) If any internal combustion engine that supplies power for the nonmetallic mineral processing equipment has an individual maximum output rating less than 600 horsepower, the owner or operator shall:

(i) For all internal combustion engines supplying power to the nonmetallic mineral processing equipment in combination, not exceed 48,900 gallons of fuel oil usage in any twelve (12) month rolling aggregate,

(ii) For any fuel oil consumed by such internal combustion engine or engines, not exceed a fuel sulfur content of 0.05% by weight, dry basis, and

(iii) Not use the nonmetallic mineral processing equipment and associated internal combustion engine or engines to result in emissions of any individual air pollutant greater than fifteen (15) tons per year in any twelve (12) month rolling aggregate.

(2) The owner or operator of any nonmetallic mineral processing equipment that is powered by electricity shall not use such nonmetallic mineral processing equipment to result in emissions of any individual air pollutant greater than fifteen (15) tons per year in any twelve (12) month rolling aggregate.

(3) The owner or operator of nonmetallic mineral processing equipment shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of subdivisions (1) and (2) of this subsection. Information sufficient to make such determinations may include the information specified in subdivision (4) of this subsection. All records made to determine compliance with the requirements of this section shall be:

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five (5) years from the date such record is created.

(4) The owner or operator of nonmetallic mineral processing equipment may make and maintain records of the following information:

(A) Records of the quantity of fuel used, in gallons, for each month and each twelve (12) month rolling aggregate; and

(B) For each nongaseous fuel shipment received, records of the sulfur content as a percent by weight, dry basis, and type of fuel.

(g) **Surface coating operation.**

(1) The owner or operator of a surface coating operation shall properly maintain equipment and conduct such coating operations only in accordance with the following limitations on VOCs, hazardous air pollutants and particulate matter:

(A) The VOC content of any coating used shall not exceed 6.3 pounds per gallon, as applied;

(B) The hazardous air pollutant content of any coating used shall not exceed 6.3 pounds per gallon, as applied;

(C) Coating and solvent usage, including diluents and cleanup solvents but excluding water, shall not, in any twelve (12) month rolling aggregate, exceed 3,000 gallons; and

(D) Any electrostatic dry powder coating operation or plasma spray operation shall be operated only with particulate control equipment that meets the following requirements:

(i) includes a minimum collection efficiency of 90%, and

(ii) is operated and maintained in good working condition.

(2) The owner or operator of a surface coating operation shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of subdivision (1) of this subsection. Information sufficient to make such determinations may include the information specified in subdivision (3) of this subsection. All records made to determine compliance with the requirements of this section shall be:

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five (5) years from the date such record is created.

(3) The owner or operator of a surface coating operation may make and maintain records of the following information:

(A) Records of the type and quantity of coating and solvent used, in gallons, for each month and each twelve (12) month rolling aggregate;

(B) Records of the hazardous air pollutant and VOC content per gallon of each coating and solvent used, as applied; and

(C) If the surface coating operation includes an electrostatic dry powder coating operation or a plasma spray operation, a record of the manufacturer's specifications for particulate control efficiency.

(h) **Fuel sulfur content.** Any of the records listed in subdivisions (1), (2) and (3) of this subsection are sufficient to demonstrate the sulfur content of fuel used as required by subsections (c), (e) and (f) of this section:

(1) A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;

(2) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or

(3) A copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment.

(i) **Reporting.**

(1) The owner or operator of any source required to make and maintain records pursuant to this section shall provide any such records, or a copy thereof, to the commissioner upon request and shall make such records available to the commissioner to inspect at the location maintained.

(2) Any record requested pursuant to subdivision (1) of this subsection shall be submitted with a certification in accordance with section 22a-174-2a(a) of the Regulations of Connecticut State Agencies.

(j) **Applicable law.** Nothing in this section shall relieve an owner or operator from any obligation to comply with:

(1) The requirements of 40 CFR 63, Subpart B as implemented in section 22a-174-3a(m) of the Regulations of Connecticut State Agencies; and

(2) Any other applicable federal, state or local law.

(k) **Application for individual permits.**

(1) Nothing in this section shall preclude the commissioner from requiring an owner or operator to obtain an individual permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies.

(2) Nothing in this section shall preclude an owner or operator from applying for an individual permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies, if applicable.

(3) An owner or operator who has filed an application for an individual permit pursuant to subdivision (1) of this subsection shall comply with the requirements of this section while such application is pending.

(Adopted effective March 15, 2002; amended January 1, 2005, April 4, 2006, February 1, 2010)

Sec. 22a-174-3c. Limitations on potential to emit for external combustion units, emergency engines, automotive refinishing operations, nonmetallic mineral processing equipment and surface coating operations

(a) **Limitations on potential to emit.**

(1) Notwithstanding the definition of ''potential emissions'' or ''potential to emit'' in section 22a-174-1 of the Regulations of Connecticut State Agencies, the potential emissions or potential to emit of any individual air pollutant for a stationary source identified in subdivision (2) of this subsection is less than fifteen tons per year, unless otherwise determined by a permit or order of the commissioner, if the owner or operator operates the source to comply with all applicable requirements of subsections (b) and (c) of this section.

(2) The owner or operator of any new or existing external combustion unit, automotive refinishing operation, nonmetallic mineral processing equipment, emergency engine or surface coating operation may limit potential emissions for all such emission units included at a stationary source pursuant to subdivision (1) of this subsection.

(b) **Operating requirements.**

(1) The owner or operator of an external combustion unit or units using gaseous fuel and operating to limit potential emissions in accordance with this section shall:

(A) Limit gaseous fuel purchased for the premises to equal to or less than 100 million cubic feet in any calendar year; and

(B) Not exceed a heat input for each external combustion unit of 50 mmBTU/hr.

(2) The owner or operator of an external combustion unit or units using distillate oil or a blend of distillate oil and biodiesel fuel and operating to limit potential emissions in accordance with this section shall:

(A) Limit distillate oil purchased, inclusive of blends of distillate oil and biodiesel fuel, for the premises to equal to or less than 328,000 gallons in any calendar year; and

(B) Not exceed a heat input for each external combustion unit of 25 MMBtu/hr.

(3) The owner or operator of an external combustion unit or units using residual oil, or a blend of residual oil and biodiesel fuel, and operating to limit potential emissions in accordance with this section shall:

(A) Limit residual oil purchased, inclusive of blends of residual oil and biodiesel fuel, for the premises to equal to or less than 89,000 gallons in any calendar year; and

(B) Not exceed a heat input for each external combustion unit of 15 MMBtu/hr.

(4) The owner or operator of an external combustion unit or units using propane and operating to limit potential emissions in accordance with this section shall:

(A) Limit propane purchased for the premises to equal to or less than 736,000 gallons in any calendar year; and

(B) Not exceed a heat input for each external combustion unit of 50 mmBTU/hr.

(5) The owner or operator of an emergency engine or engines using gaseous fuel and operating to limit potential emissions in accordance with this section shall limit gaseous fuel purchase for the premises to equal to or less than three million three hundred sixty thousand (3,360,000) cubic feet in any calendar year.

(6) The owner or operator of an emergency engine or engines using distillate oil, or a blend of distillate oil and biodiesel fuel, and operating to limit potential emissions in accordance with this section shall limit distillate oil purchase for the premises, inclusive of blends of distillate oil and biodiesel fuel, to equal to or less than 21,000 gallons in any calendar year.

(7) The owner or operator of an emergency engine or engines using propane and operating to limit potential emissions in accordance with this section shall limit propane purchase for the premises to equal to or less than 100,000 gallons in any calendar year;

(8) The owner or operator of an automotive refinishing operation operating to limit potential emissions in accordance with this section shall limit VOC containing coating or solvent purchase for the premises to equal to or less than 1,000 gallons in any calendar year.

(9) The owner or operator of nonmetallic mineral processing equipment operating to limit potential emissions in accordance with this section shall limit fuel oil purchase for the premises to equal to or less than 22,000 gallons in any calendar year.

(10) The owner or operator of surface coating equipment operating to limit potential emissions in accordance with this section shall limit purchase for the premises of VOC containing coatings, including diluents and cleanup solvents but excluding water, to equal to or less than 1,500 gallons in any calendar year.

(c) **Records.**

(1) The owner or operator of any source that is operating to comply with the requirements of subsection (b) of this section shall maintain purchase records to demonstrate compliance with applicable fuel, coating and solvent limitations.

(2) The owner or operator of any source shall make purchase records maintained pursuant to subdivision (1) of this subsection available to the commissioner to inspect and copy upon request.

(3) The owner or operator of any source maintaining purchase records pursuant to subdivision (1) of this subsection shall maintain such records for five (5) years from the date such records are created.

(d) **Applicable law.** Nothing in this section shall relieve an owner or operator from any obligation to comply with:

(1) The requirements of 40 CFR 63, Subpart B as implemented in section 22a-174-3a(m) of the Regulations of Connecticut State Agencies; and

(2) Any other applicable federal, state or local law.

(e) **Individual application.**

(1) Nothing in this section shall preclude the commissioner from requiring an owner or operator to obtain an individual permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies.

(2) An owner or operator who has filed an application for an individual permit pursuant to subdivision (1) of this subsection shall comply with the requirements of this section while such application is pending.

(Adopted effective March 15, 2002; amended April 4, 2006, February 1, 2010)

Sec. 22a-174-4. Source monitoring, record keeping and reporting

(a) **Definitions.** For the purposes of this section:

(1) ''Calendar Quarter'' means a consecutive three (3) month period (nonoverlapping) beginning on January 1, April 1, July 1 or October 1.

(2) ''Coal burning equipment'' means fuel burning equipment that combusts coal.

(3) ''Gaseous, liquid or solid fuel burning equipment'' means fuel burning equipment that combusts gaseous, liquid or solid fuels.

(4) ''Standby fuel burning equipment'' means fuel burning equipment that is used only to provide backup heat or power.

(b) **Opacity continuous emissions monitoring (CEM).**

(1) Except as provided in subdivisions (2) and (3) of this subsection, the owner or operator of the stationary sources listed in subparagraphs (a) through (d) of this subdivision shall install opacity CEM equipment. The owner or operator shall operate and maintain installed opacity CEM equipment in accordance with subsections (c)(3) and (c)(4) of this section and retain the data generated in accordance with subsection (d) of this section:

(A) Any coal burning equipment;

(B) Any liquid or solid fuel burning equipment with a maximum rated heat input greater than or equal to two hundred fifty million Btu per hour (250,000,000 Btu/hr);

(C) Any incinerator with a maximum rated input in excess of two thousand pounds per hour (2,000 lbs/hr); and

(D) Any process source with particulate matter emissions exceeding twenty-five pounds per hour (25 lbs/hr) after the application of control equipment, when operated at maximum rated capacity.

(2) The provisions of subdivision (1)(A) of this subsection, concerning coal burning equipment, shall not apply to:

(A) Any space heater installed in any single family home on or before May 1, 1975, provided that such space heater does not combust coal with a sulfur content greater than or equal to three-quarters of one percent (0.75%) by weight (dry basis);

(B) Any coal burning equipment in a commercial establishment in regular operation on or before May 1, 1975, provided that such coal burning equipment does not combust coal with a sulfur content greater than or equal to three-quarters of one percent (0.75%) by weight (dry basis) and coal consumption is less than seventy-five (75) tons per year; and

(C) Any coal burning equipment used primarily for educational or historical demonstrations or exhibits, provided that such coal burning equipment does not combust coal with a sulfur content exceeding one and one-half percent (1.5%) by weight (dry basis). Such coal burning equipment includes, but is not limited to, blacksmiths' forges, steam locomotives, and steamboats.

(3) The provisions of subdivision (1)(B) of this subsection, concerning gaseous, liquid or solid fuel burning equipment, shall not apply to:

(A) Any standby fuel burning equipment operating less than one hundred sixty-eight (168) hours in a calendar year. For the purpose of this subparagraph, the term ''operating'' shall not include emissions testing or operating only to maintain reliability in emergency situations; and

(B) Turbines combusting natural gas, liquid fuel or a mixture of liquid fuel and natural gas that comply with the applicable particulate matter and opacity limitations set forth in section 22a-174-18 of the Regulations of Connecticut State Agencies without utilizing pollution control equipment.

(4) The Commissioner may, in writing, request written documentation from the owner or operator of equipment listed in subdivisions (2) or (3) of this subsection to ascertain the applicability of subdivisions (2) or (3) of this subsection. An owner or operator shall deliver such documentation to the Commissioner within thirty (30) days of receipt of such a written request.

(5) An owner or operator that claims subsection (b)(1) of this section is not applicable by virtue of compliance with subsections (b)(2) or (b)(3) of this section shall, upon notice from the Commissioner, install, operate and maintain opacity CEM equipment according to this section, and comply with subsections (c) and (d) of this section, if the Commissioner finds:

(A) Repeated noncompliance with section 22a-174-18 of the Regulations of Connecticut State Agencies has occurred;

(B) Noncompliance with the requirements, limitations or restrictions set forth in subdivisions (2) or (3) of this subsection has occurred;

(C) Operation of the subject source has interfered with or is likely to interfere with the attainment or maintenance of ambient air quality standards, create a health hazard or create a nuisance; or

(D) Monitoring equipment is technically feasible, economically feasible and needed to determine compliance with Chapter 446c of the Connecticut General Statutes and Regulations promulgated thereunder.

(6) The notice provided for in subsection (b)(5) of this section shall be in the form of a permit or order and shall specify requirements for opacity CEM equipment installation and operation including a day by which such installation and operation is to commence.

(c) **General opacity and gaseous CEM equipment operation and performance.**

(1) If, for a source of air pollution, the Commissioner determines that opacity or gaseous CEM equipment is reasonably available, technically feasible, economically feasible and necessary for the Commissioner to obtain opacity or emission data to evaluate compliance with chapter 446c of the Connecticut General Statutes and Regulations promulgated thereunder, the Commissioner may require, by written notice to the owner or operator of such source, the installation and operation of CEM equipment. Such written notice shall be in the form of a regulation, permit or order and shall include requirements for installation and operation including a day by which such installation and operation is to commence.

(2) If the Commissioner determines that CEM equipment is not reasonably available for a source of air pollution, the Commissioner may, by written notice, require the owner or operator of such source to comply with an alternative monitoring technique or conduct intermittent stack testing to verify the source is in compliance with Chapter 446c of the Connecticut General Statutes and Regulations promulgated thereunder. Such written notice shall be in the form of a regulation, permit or order

and shall include the requirments for such alternative monitoring or testing including a day by which such alternative monitoring or testing is to commence.

(3) Monitoring plan. Unless otherwise specified by permit or order of the Commissioner, the owner or operator of any source for which construction commenced on or after the effective date of this amendment to this section who is required to install, operate and maintain opacity CEM equipment pursuant to subsection (b) of this section or gaseous or opacity CEM equipment pursuant to subdivision (1) of this subsection shall submit to the Commissioner for approval, at least sixty (60) days before the initiation of the performance specification testing required by subdivision (4) of this subsection, a monitoring plan containing the information specified in subparagraphs (A) through (D) of this subdivision:

(A) A brief description of the source, including, but not limited to, type of unit or process, type of fuel combusted, type or types of emission control devices, and operational parameters;

(B) A description of the monitoring equipment design, proposed monitor location and sampling site location. This description should include, but is not limited to, facility schematics and engineering drawings of the monitoring and sample probe locations, data acquisition system specifications, analytical monitoring technique and sampling system design;

(C) An explanation of the performance specification testing to be conducted by the owner or operator as required by subdivision (4) of this subsection; and

(D) A quality assurance plan including procedures for calibration, calibration drift determination and adjustment, preventative maintenance, data recording, calculation, audits and corrective action for monitoring system breakdowns.

(4) Performance specifications and quality assurance requirements. The owner or operator of any source required to install, operate and maintain CEM equipment pursuant to this section shall meet the following performance specifications and quality assurance requirements:

(A) The applicable performance specifications and quality assurance requirements of 40 CFR 60 appendices B and F, unless the source is subject to 40 CFR 75, in which case the owner or operator shall meet the applicable performance specifications and quality assurance requirements of 40 CFR 75;

(B) For opacity CEM equipment, the following quality assurance requirements:

(i) Calibration shall be adjusted whenever the daily zero or upscale calibration exceeds plus/minus two percent (±2%) opacity,

(ii) Data shall be invalid for calculating data availability in accordance with subdivision (5) of this subsection if the zero or upscale calibration value exceeds either the reference zero or the upscale calibration value recorded during the most recent clear-path calibration by plus/minus two percent (±2%) opacity for five (5) consecutive days or plus/minus five percent (±5%) opacity on any single day. The period of invalid data begins with either the fifth consecutive occurrence of a drift value exceeding plus/minus two percent (±2%) opacity or with the last daily check preceding the single occurrence of a drift value exceeding plus/minus five percent (±5%) opacity. The period of invalid data shall end when a calibration drift check, conducted after corrective action, demonstrates that reliable monitoring data is being generated,

(iii) Quality assurance audits shall be conducted during each calendar quarter in which the source operates,

(iv) The Commissioner shall be notified, in writing, no fewer than thirty (30) days prior to the initially proposed quality assurance audit, and

(v) Quality assurance audits shall be conducted in accordance with the procedures contained in ''performance audit procedures for opacity monitors,'' EPA document No. 450/4-92/010, dated April 1992. If EPA promulgates quality assurance procedures in 40 CFR 60, appendix F, quality assurance audits shall be conducted according to such procedures. If either EPA document No. 450/4-92/010 or subsequently promulgated procedures in 40 CFR 60, appendix F, as applicable, does not contain audit procedures for the opacity CEM selected by the owner or operator, the owner or operator shall, in writing, propose audit procedures to the Commissioner for review and written approval at least thirty (30) days prior to the initial opacity CEM audit; and

(C) If the results of a quality assurance audit fail to conform to the quality assurance requirements of subparagraph (B) of this subdivision, such opacity CEM data shall be deemed invalid by the Commissioner, and the owner or operator will be deemed to have failed the quality assurance audit. Data collected after any failed quality assurance audit shall be invalid for calculating percent data availability in accordance with subdivision (5)(A) of this subsection.

(5) Data availability.

(A) The owner or operator of any source required to install, operate and maintain CEM equipment in accordance with this section shall meet the following data availability requirements on an emission limitation-specific basis:

(i) While the source is operating, the owner or operator shall operate required CEM equipment pursuant to section 22a-174-7(b) of the Regulations of Connecticut State Agencies, and allowable periods of missing data shall apply only to periods of deliberate shutdown allowed by section 22a-174-7(b) of the Regulations of Connecticut State Agencies, unavoidable system malfunction or as otherwise provided under this subdivision,

(ii) Except as provided in subparagraphs (B) and (C) of this subdivision, for opacity emissions, data shall be available for no less than ninety-five percent (95%) of the total operating hours of the source in any calendar quarter,

(iii) Except as provided in subparagraphs (B) and (C) of this subdivision, for air pollutant emissions other than opacity, data shall be available for no less than ninety percent (90%) of the total operating hours of the source in any calendar quarter, and

(iv) Percent data availability shall be calculated using the following equation:

$$\%\ \text{Data Availability} = \left(\frac{\text{Unit Operating Time–Monitoring Downtime}}{\text{Unit Operating Time}} \right) * 100$$

WHERE:

Unit operating time = Total hours of source operation at any level during the calendar quarter.

Monitoring downtime = Total hours of source operation at any level during the calendar quarter where either no CEM equipment data was collected or the CEM equipment data was invalid. Such periods include, but are not limited to, quality assurance activities such as calibration, preventative maintenance, and calibration drift exceedances or quality assurance audits that result in invalid data.

(B) The Commissioner, in writing, may exempt the owner or operator of a source from the minimum data availability requirements of subparagraphs (A)(ii) and (A)(iv) of this subdivision if such source is equipped with properly operating opacity CEM equipment, and the source is operated less than or equal to five hundred four (504) hours in the calendar quarter.

(C) The Commissioner, in writing, may exempt the owner or operator of a source from the minimum data availability requirements of subparagraphs (A)(iii) and (A)(iv) of this subdivision if such source is equipped with properly operating gaseous CEM equipment, and the source is operated less than or equal to three hundred thirty-six (336) hours in the calendar quarter.

(D) To obtain an exemption under subparagraphs (B) or (C) of this subdivision, the owner or operator of the source shall submit the following information to the Commissioner within thirty (30) days following the last day of the calendar quarter for which the exemption is sought:

(i) A request for an exemption for a specified calendar quarter,

(ii) The actual operating hours of the source during the calendar quarter,

(iii) The duration of and nature of the CEM equipment breakdowns, repairs or adjustments made during the calendar quarter, and

(iv) The actual data availability achieved during the calendar quarter.

(d) **Record keeping and reporting.**

(1) The Commissioner may, by written notice, require the owner or operator of any source to create, maintain and submit data, records or reports of monitoring data and other information deemed necessary by the Commissioner to evaluate compliance with Chapter 446c of the Connecticut General Statutes and Regulations promulgated thereunder. Such information shall be recorded, compiled and submitted on forms as may be furnished or prescribed by the Commissioner. The written notice shall provide the date by which such data, records or reports shall be submitted to the Commissioner.

(2) Any document, data, plan, record or report required to be submitted to the Commissioner by this section shall include a certification signed by a responsible corporate officer or a duly authorized representative of such officer, as those terms are defined in subdivision (2) of subsection (b) of Section 22a-430-3 of the Regulations of Connecticut State Agencies, and by the individual or individuals reponsible for actually preparing such document, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate and complete, and each of whom shall certify in writing as follows:

> ''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes or, in accordance with Section 22a-6 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.''

(3) The owner or operator of any source subject to the provisions of Chapter 446c of the Connecticut General Statutes and Regulations adopted thereunder shall

maintain all data, documents and reports required by this section in a legible and comprehensible form for five (5) years from the date such data, document or report is created.

(4) Each calendar quarter, the owner or operator of any opacity CEM equipment required pursuant to this section shall submit the following information to the commissioner:

(A) The data obtained through such equipment during the preceding calendar quarter that is required to determine compliance with an emission limitation or standard;

(B) A summary of such data;

(C) A copy of the quality assurance audit conducted for that calendar quarter; and

(D) A summary of all corrective actions taken in response to a failed CEM equipment audit.

(5) Submissions made to comply with subdivision (4) of this subsection shall be made no later than thirty (30) days following the end of each calendar quarter.

(e) The Commissioner may exempt an owner or operator of a source subject to this section from the requirements of this section as they apply to a particular air pollutant if such owner or operator demonstrates in writing, for the Commissioner's written approval, that such source is physically incapable of violating any applicable requirement for such air pollutant set forth in Chapter 446c of the Connecticut General Statutes and regulations promulgated thereunder.

(f) Upon written notice in the form of a permit or order to an owner or operator of a source granted an exemption under subsection (e) of this section, such owner or operator shall install, operate and maintain CEM equipment in accordance with such notice if:

(1) The Commissioner determines there is repeated noncompliance with Section 22a-174-18 of the Regulations of Connecticut State Agencies;

(2) Operation of the subject source has interfered with or is likely to interfere with the attainment or maintenance of ambient air quality standards, create a health hazard or create a nuisance; or

(3) The source has been altered or the operations of the source have changed such that subsection (e) of this section is no longer applicable.

(Effective February 1, 1989; amended April 1, 2004)

Sec. 22a-174-5. Methods for sampling, emission testing, sample analysis, and reporting

(a) All sampling, emission testing, and reporting shall be done in accordance with procedures prescribed by or acceptable to the Commissioner under subsection 22a-174-5 (d).

(b) **Sampling and emission testing methods.**

(1) Analysis for the sulfur content of liquid fuels shall be done according to the American Society for Testing and Materials method D 4294, or the most current methods approved by the American Society for Testing and Materials for the analysis of sulfur content of liquid fuels.

(2) Analysis for sulfur content of solid fuel shall be done according to the most current approved methods of the American Society for Testing and Materials, as follows:

(A) Mechanical sampling by method D 2234 or the most current method approved by the American Society for Testing and Materials for mechanical sampling for sulfur content of solid fuels;

(B) Sample preparation by method D 2013 or the most current method approved by the American Society for Testing and Materials for sample preparation; and

(C) Sample analysis by method D 3176 or D 3180 or the most current method approved by the American Society for Testing and Materials for the analysis of solid fuel sulfur content.

(3) The emission testing method for sulfur dioxide emissions from stationary sources shall be that specified as Method 6 in 40 CFR 60.

(4) The emission testing method for sulfur oxides emissions from sulfuric acid plants, and from any other source as the commissioner shall determine by regulation, shall be that specified as Method 8 in 40 CFR 60.

(5) The emission testing method for particulate emissions from all stationary sources shall be that specified as Method 5 in 40 CFR 60.

(6) Emission tests for organic compound emissions including dioxin emissions shall be conducted in a manner approved by the commissioner.

(7) The emission testing method for nitrogen oxide emissions from stationary sources shall be that specified as Method 7E in 40 CFR 60.

(c) All emissions tests undertaken to comply with this section shall be made under the direction of persons qualified by training or experience in the field of sampling emissions from air pollution sources.

(d) Sampling and emission testing methods as specified in subsection (b) of this section may be modified or adjusted with the approval of the Commissioner as required by the specific sampling conditions or needs and in accordance with good engineering practice, judgment and experience. For the purposes of demonstrating compliance with any regulation adopted under the provisions of Section 22a-174 of the General Statutes, any test shall be performed with the prior approval of the Commissioner as to the test method, sampling protocol and sample analysis procedures. The Commissioner shall provide forms for obtaining prior approval of testing methods, sampling protocol and sample analysis procedures.

(e) (1) The owner or operator of a stationary source of air pollution with maximum uncontrolled emissions of any particular air pollutant greater than one hundred (100) tons per year shall be required to carry out emission tests as prescribed by the Commissioner. Such test or tests shall be conducted at such intervals as the Commissioner may specify for an individual source.

(e)(2) In addition to the emission tests required in subdivision 22a-174-5(e)(1), the commissioner may require the owner or operator of any stationary source to conduct emission tests of emissions. Tests required under the provisions of subdivision 22a-174-5(e)(1) and this subdivision shall be conducted in a manner satisfactory to the commissioner. All such tests shall be conducted at the expense of the owner or operator of the pollution source being tested, and the commissioner or his representative shall be entitled to observe the tests, including initial sampling, subsequent laboratory analysis and other related procedures.

(f) **Fees for visual tests.**

(1) The owner or operator of a stationary source who is required to conduct an emission test under either subsection (e)(1) or (e)(2) of this section may be required to conduct a visual test through the use of a dust compound in lieu of the emission testing otherwise required. Such testing shall be conducted annually or at an interval determined by the commissioner and in a manner satisfactory to the commissioner.

(2) The owner or operator of a stationary source who, under the provisions of subdivision (1) of this subsection, is required to conduct a visual test shall pay a fee of five hundred and sixty-two dollars and fifty cents ($562.50).

(3) The commissioner may increase the fee specified in subdivision (2) of this subsection to a maximum fee of six hundred and forty-five dollars ($645.00) if the test conditions under subdivision (1) of this subsection are deemed hazardous as determined by valid Connecticut State Employee Collective Bargaining Agreements.

(4) The commissioner may reduce the fee specified in subdivision (2) of this subsection to no less than three hundred and ninety-seven dollars and fifty cents ($397.50) or the fee specified in subdivision (3) of this subsection to no less than four hundred and thirty-five dollars ($435.00) if the test condition under subdivision (1) of this subsection require that the Department use one staff person to monitor the visual test under this subsection.

(5) The owner or operator of a stationary source who is required to pay a fee under this subsection shall submit such fee to the commissioner accompanied by forms furnished by the commissioner.

(Effective April 25, 1988; amended May 26, 2004, April 4, 2006)

Sec. 22a-174-6. Air pollution emergency episode procedures

(a) When air pollutant concentrations monitored by the Department indicate that short term high pollutant levels may be expected which are likely to have an adverse impact on human health, the Commissioner shall prepare for the declaration of an appropriate air pollution emergency episode.

(b) **Industrial Emergency episode criteria.** In determining that any stage of an air pollution industrial emergency episode exists, the Commissioner shall be guided by the following criteria:

(b) (1) First Stage: Industrial Air Pollution Alert. An air pollution industrial alert shall be declared whenever the concentration of one or more of the pollutants listed below reaches the described level at any monitoring site operated by the Department:

A SO_2 concentration of 800 ug/m^3 (0.3 ppm), 24-hour average;

A PM_{10} concentration of 350 ug/m^3, averaged over 24-hours, measured in accordance with the provisions of Appendix C of Title 40 Code of Federal Regulations part 58 revised as of July 1, 1989; or

A NO_2 concentration of 1130 ug/m^3 (0.6 ppm), 1-hour average; 282 ug/m^3 (0.15 ppm), 24-hour average; and meteorological conditions are such that the pollutant concentrations can be expected, unless control actions are taken, to remain at the above levels or increase over a period of twelve (12) or more hours.

(b) (2) Second Stage: Industrial Air Pollution Warning. An industrial air pollution warning shall be declared whenever one of the following levels is reached at any monitoring site operated by the Department:

A SO_2 concentration of 1,600 ug/m^3 (0.6 ppm), 24-hour average;

A PM_{10} concentration of 420 ug/m^3, averaged over 24-hours, measured in accordance with the provisions of Appendix C of Title 40 Code of Federal Regulations part 58 revised as of July 1, 1989; or

A NO_2 concentration of 2,260 ug/m^3 (1.2 ppm), 1-hour average; 565 ug/m^3 (0.3 ppm), 24-hour average; and meteorological conditions are such that pollutant concentrations can be expected, unless control actions are taken, to remain at the above levels or increase over a period of twelve (12) or more hours.

(b) (3) Third Stage: An industrial air pollution emergency shall be declared when any one of the following levels is reached at any monitoring site operated by the Department:

A SO_2 concentration of 2,100 ug/m^3 (0.8 ppm), 24-hour average;

A PM_{10} concentration of 500 ug/m^3, averaged over 24-hours, measured in accordance with the provisions of Appendix C of Title 40 Code of Federal Regulations part 58 revised as of July 1, 1989; or

A NO_2 concentration of 3,100 *u*g/m^3 (1.6 ppm); 1-hour average; 750 *u*g/m^3 (0.4 ppm), 24-hour average; and meterological conditions are such that this condition can be expected to continue for twelve (12) or more hours.

(b) (4) Termination. Once any stage of an industrial air pollution emergency episode has been declared, it shall remain in effect until the Commissioner announces its termination.

(c) Plans of action at each stage of an industrial air pollution emergency episode.

(c) (1) First Stage: Industrial Air Pollution Alert. Whenever the Commissioner declares an industrial air pollution alert, persons responsible for the operation of a source of air pollution shall as rapidly as possible take all required steps for pollution reduction as described in table I. Persons responsible for the operation of a source of air pollution which emits, or has the capacity to emit, more than 100 tons of pollutants per year, as determined before the application of control equipment, shall put into effect the preplanned abatement strategy for an industrial air pollution alert.

Table I

Steps for Air Pollution Reduction at an Industrial Air Pollution Alert

1. There shall be no open burning, except as authorized by the Commissioner in writing to safeguard public health and safety.
2. The use of incinerators for the disposal for any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.
3. Boiler lancing or soot blowing required for fuelburning equipment shall be performed only between the hours of 12 noon and 4 p.m.
4. Fuels having low ash and sulfur content shall be used.
5. Electric power generation shall, whenever possible, be diverted to facilities outside the alert area.
6. Steam load demands shall be reduced.
7. Manufacturing operations shall be curtailed, postponed, or deferred.
8. Trade waste disposal operations which emit solid particles, gas vapors or malodorous substances shall be deferred.
9. Heat load demands for processing shall be reduced.

(c) (2) Second Stage: Industrial Air Pollution Warning. Whenever the Commissioner declares an industrial air pollution warning persons responsible for the operation of a source of air pollution shall as rapidly as possible take all required steps for pollution reduction as described in table II. Persons responsible for the operation of a source of air pollution which emits, or has the capacity to emit, more than 100 tons of pollutants per year, as determined before the application of control equipment, shall put into effect the preplanned abatement strategy for an air pollution industrial warning.

Table II

Steps for Air Pollution Reduction at an Air Pollution Industrial Warning

1. There shall be no open burning except as authorized by the Commissioner in writing to safeguard public health and safety.
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.

3. Boiler lancing or soot blowing required for fuel-burning equipment shall be performed only between the hours of 12 noon and 4 p.m.

4. All unessential operation of motor vehicles shall be terminated.

5. Electric power generation shall, to the maximum extent possible, be diverted to facilities outside the warning area.

6. Steam load demands shall be reduced the maximum extent possible.

7. Manufacturing operations shall be ceased, curtailed, postponed, or deferred.

8. Trade waste disposal operations which emit solid particles, gas vapors, or malodorous substances shall be deferred.

9. Heat load demands for processing shall be reduced the maximum extent possible.

(c) (3) Third Stage Industrial Air Pollution Emergency. Whenever the Commissioner declares an industrial air pollution emergency, persons responsible for the operation of a source of air pollution shall immediately take all required steps for pollution reduction as described in table III, persons responsible for the operation of a source of air pollution which emits, or has the capacity to emit, more than 100 tons of pollutants per year, as determined before the application of control equipment, shall put into effect the preplanned abatement strategy for an industrial air pollution emergency.

Table III

Steps for Air Pollution Reduction at an Industrial Air Pollution Emergency

1. There shall be no open burning, except as authorized by the Commissioner in writing to safeguard public health and safety.

2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.

3. All enterprises and activities described below shall immediately cease operations:

A. Mining and quarrying.

B. All construction work except that essential to secure sites against endangering life and limb.

C. All manufacturing establishments except those involved in combatting the air pollution emergency in accordance with preplanned abatement strategies.

D. All wholesale trade establishments, i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.

E. All state and local government offices except those necessary for public safety and welfare, including any involved in combatting the industrial air pollution emergency.

F. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.

G. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices.

H. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.

I. Advertising offices; consumer credit reporting, adjustment and collection agencies; duplicating, addressing, blueprinting; photocopying, mailing, mailing list and stenographic services, equipment rental services, commercial testing laboratories.

J. Automobile repair and servicing and all parking and garage operations.

K. All offices, clerical and professional service enterprises including law and accounting offices but excluding doctors' offices and medical laboratories.

L. All schools of any kind.

M. Establishments rendering amusement and recreational services including motion picture theaters.

4. All commercial, manufacturing or service establishments not shut down by this regulation shall institute such actions as will result in maximum reduction of air pollutants from their activities by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.

5. The use of motor vehicles of any kind shall cease except in emergencies with the express approval of local or state police.

(d) (1) Preplanned abatement strategies. Any person responsible for the operation of a source of air pollutants that emits, or has the capacity to emit, 100 tons or more of pollutants a year as determined before the application of control equipment, shall prepare a standby plan for reducing the emission of air pollutants during each of the three stages of an industrial air pollution emergency episode, i.e., Industrial Alert; Industrial Warning; Industrial Emergency. Standby plans shall be designed to reduce or eliminate emission of air pollutants in accordance with the requirements set forth in Tables I–III.

(d) (2) Any person responsible for the operation of a source of air pollutants not set forth under subdivision (d) (1) shall, when requested by the Commissioner, prepare standby plans for reducing the emissions of air pollutants during each of the four stages of an industrial air pollution emergency episode. Such standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the requirements set forth in Tables I–III.

(d) (3) All standby plans shall be in writing, identify the source of air pollutants, contain a commitment as to the amount of reduction to be achieved, and set forth in sufficient detail for the Commissioner to evaluate the manner in which the reduction will be accomplished.

(d) (4) During any Industrial Air Pollution Emergency Episode, standby plans shall be made available on the premises to persons authorized to enforce these regulations.

(d) (5) The standby plans required by subdivision (d) (1) shall be submitted to the Commissioner by August 1, 1972. Standby plans requested by the Commissioner under subdivision (d) (2) shall be submitted within 90 days of the date of receipt of the request. When in the judgment of the Commissioner a standby plan is not adequate to carry out the objectives set forth in Tables I–III, he may reject the plan and require that it be resubmitted in an acceptable form within 30 days from the date of rejection.

(e) **Declaration of an industrial air pollution emergency episode in aid of sister state.** Notwithstanding that the concentration of pollutants in the air over the State of Connecticut does not meet the criteria set forth in subdivisions (b) (1) to (b) (3) for any stage of an industrial air pollution emergency episode, the Commissioner may nevertheless declare such emergency episode to be in effect at the stage level he deems appropriate when it becomes necessary to reduce the level of air

pollutants in Connecticut to avoid intensifying deteriorated air conditions in one or more areas outside the state that are endangering the health and welfare of residents in those areas.

(f) **Emissions from a limited number of sources.** Whenever the Commissioner determines that a specified emergency criteria level set forth in subdivisions (b) (1) to (b) (3) has been reached in a limited area, he may restrict the response to such emergency in the manner he deems appropriate, including notification to those sources contributing to the emergency levels that the abatement actions of Tables I, II, or III, as the case may be, are required and shall be put into effect until the pollutant levels are reduced below the criteria levels.

(g) **Automotive emergency episode criteria.** In determining any stage of an automotive air pollution emergency episode to exist, the Commissioner shall be guided by the following criteria:

(g) (1) First Stage: Automotive Air Pollution Alert. An automotive air pollution alert shall be declared whenever the concentration of one or more of the pollutants listed below reaches the described level at any monitoring site operated by the Department of Environmental Protection: CO: 17 ug/m^3 (15 ppm), 8-hour average; Oxidant (O_3): 400 ug/m^3(0.2 ppm), 1-hour average; and meteorological conditions are such that the pollutant concentrations can be expected, unless control actions are taken, to recur the next calendar day.

(g) (2) Second Stage: Automotive Air Pollution Warning. An automotive air pollution warning shall be declared whenever evidence shows that air quality is continuing to degrade from the automotive air pollution advisory and alert one of the following levels is reached at any monitoring site operated by the Department of Environmental Protection: CO: 34 ug/m^3 (30 ppm), 8-hour average;

Oxidant (O_3) 800 ug/m^3 (0.4 ppm), 1-hour average; and meteorological conditions are such that pollutant concentrations can be expected, unless control actions are taken, to recur the next calendar day.

(g) (3) Third Stage: Automotive Air Pollution Emergency. An automotive air pollution emergency shall be declared whenever evidence shows that air quality has degraded to a level deemed unacceptable by the commissioner under any circumstances and requiring the most stringent control actions. An automotive air pollution emergency will automatically be declared when any one of the following levels is reached at any monitoring site operated by the Department of Environmental Protection: CO: 46 ug/m^3 (40 ppm), 8-hour average;

Oxidant (O_3): 1,000 ug/m^3 (0.5 ppm), 1-hour average; and meteorological conditions are such that this condition can be expected to recur the next calendar day.

(g) (4) Termination. Once any stage of an automotive air pollution emergency episode has been declared, it shall remain in effect until the Commissioner announces its termination.

(h) **Plans of action at each stage of emergency.**

(h) (1) First Stage: Automotive Air Pollution Alert. Whenever the Commissioner declares an automotive air pollution alert, all unessential operation of motor vehicles shall be terminated.

(h) (2) Second Stage: Automotive Air Pollution Warning. Whenever the Commissioner declares an automotive air pollution warning, persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

(h) (3) Third Stage: Automotive Air Pollution Emergency. Whenever the Commissioner declares an automotive air pollution emergency, all private non-commer-

cial motor vehicle operations shall cease except where absolutely essential for necessities of life including medical treatment, and commercial vehicle operations shall be reduced to the absolute minimum necessary to transport necessities and provide for public safety and welfare.

(Effective July 7, 1993)

Sec. 22a-174-7. Air pollution control equipment and monitoring equipment operation

(a) **Breakdown, failure and deliberate shutdown.**

(1) Neither breakdown, failure nor deliberate shutdown of air pollution control equipment or monitoring equipment nor submission of any notice pursuant to this section shall excuse the owner or operator of any source from the obligation to comply with an applicable emission limitation or emission standard or other applicable requirement.

(2) If an owner or operator operates a stationary source to produce emissions of an air pollutant during breakdown, failure or deliberate shutdown of any air pollution control equipment so as to produce an exceedance of an applicable emission limitation or emission standard, the owner or operator shall:

(A) Exercise due diligence to minimize emissions while such control equipment is inoperative;

(B) Continue the use of monitoring equipment; and

(C) Give notice to the Commissioner as required by subsections (d) and (e) of this section.

(b) **Operation of air pollution control equipment and monitoring equipment.**

(1) While a stationary source is in operation, no person shall deliberately shut down any operational air pollution control or monitoring equipment or deliberately keep such air pollution control equipment or monitoring equipment shut down except to perform necessary maintenance, which cannot be accomplished When the stationary source itself is not in operation and is not emitting air pollutants.

(2) Notwithstanding subdivision (1) of this subsection, a source owner or operator may deliberately shut down air pollution control equipment or monitoring equipment while the source is in operation if:

(A) The owner or operator is not required to operate such equipment by a permit, order or regulation;

(B) The source is in compliance with applicable emission limitations and emission standards while the air pollution control equipment is shut down; and

(C) Emissions released while monitoring equipment that measures such emissions is deliberately shut down are not used to calculate credits generated in an emissions credit trading program.

(c) No person may tamper with, render inaccurate or render inoperable any air pollution control equipment or monitoring equipment required by permit, order or regulation.

(d) If any breakdown, failure or deliberate shutdown of air pollution control equipment or monitoring equipment required by permit, order or regulation continues for more than twenty-four (24) hours and the source operates at any time after the expiration of twenty-four hours and during source operation after the breakdown, failure or deliberate shutdown an exceedance of an emission limitation or standard occurs, the owner or operator shall submit a written notice to the Commissioner postmarked within ten (10) days of the commencement of the breakdown, failure or deliberate shutdown. Such written notice shall include, but is not limited to, the following:

(1) Identification of the specific air pollution control or monitoring equipment subject to the breakdown, failure or deliberate shutdown, as well as information concerning its location, and, where applicable, registration or permit number;

(2) The date, time, duration, explanation and description of each breakdown, failure or deliberate shutdown of the air pollution control or monitoring equipment;

(3) The nature and quantity of air pollutants emitted during the period that the pollution control or monitoring equipment is not operating;

(4) Identification of dates of inspection and maintenance of the subject equipment prior to the breakdown, failure or deliberate shutdown, including a description of inspection findings and any maintenance conducted;

(5) A description of all measures that the owner or operator has taken or will take to resume operation of the air pollution control or monitoring equipment; and

(6) A description of all measures taken and continuing to be taken to minimize the length of the shutdown period such as the use of off-shift labor and equipment.

(e) **Immediate Notification.**

(1) The owner or operator shall notify the department, bureau of air management, compliance and field operations division, as required by subdivision (2) of this subsection if, at the time of discovery of any breakdown, failure or deliberate shutdown of air pollution control or monitoring equipment required to be operated by permit, order or regulation:

(A) The owner or operator reasonably expects the breakdown, failure or deliberate shutdown to continue for more than 24 hours; and

(B) The owner or operator anticipates operating the source at any time after the expiration of twenty-four hours.

(2) Notification to comply with this subsection shall be made by telephone, electronic mail, facsimile or in person immediately after the breakdown, failure or deliberate shutdown is discovered or in the exercise of reasonable care should have been discovered, and in no case shall such notice be made later than two (2) business days after such breakdown, failure or deliberate shutdown.

(f) Except as provided in subsection (g) of this section, compliance with the notice requirements of subsections (d) and (e) of this section or the operation requirements of subsection (b) of this section shall not relieve the owner or operator from complying with all applicable emission limitations and emission standards. The Commissioner may take any enforcement action, including requiring the owner or operator to cease operation of the stationary source, or attach any condition to the operation of the stationary source during the period of any breakdown, failure or deliberate shutdown of air pollution control or monitoring equipment. Nothing in this section or any notice submitted pursuant to this section shall preclude the Commissioner from taking any action authorized by law to protect human health and the environment.

(g) An owner or operator of a stationary source is exempt from the notification requirements of subsections (d) and (e) of this section if:

(1) The owner or operator holds a valid Title V permit for the stationary source issued by the department; or

(2) The owner or operator deliberately shuts down air pollution control or monitoring equipment in accordance with subsection (b)(2) of this section.

(Effective April 25, 1988; amended April 1, 2004)

Sec. 22a-174-8. Compliance plans and schedules

(a) All new sources must comply with all regulations as of startup of operations.

(b) (1) Existing sources must comply with subsections 22a-174-17 (b), 22a-174-18 (b), 22a-174-18 (d), and 22a-174-23 (a) by June 1, 1972.

(b) (2) Existing sources must comply with subsections 22a-174-18 (a), 22a-174-18 (c), 22a-174-18 (e), 22a-174-18 (f), 22a-174-19 (b) through (f) inclusive, 22a-174-20 (a) through (e) inclusive, subdivisions 22a-174-20 (f) (1), 22a-174-20 (f) (2), 22a-174-20 (f) (5), 22a-174-20 (f) (6), 22a-174-20 (f) (7), 22a-174-20 (f) (8), 22a-174-20 (f) (9), 22a-174-20 (f) (10), 22a-174-21 (a) and (b) and 22a-174-22 (a) through (c) inclusive as expeditiously as practicable but not later than June 1, 1973.

(b) (3) Sources subject to subdivision 22a-174-20 (f) (4) must submit to the Commissioner a proposed compliance plan and schedule by November 1, 1972, which plan must provide for compliance with appropriate regulations as expeditiously as practicable but not later than April 1, 1975. Sources that do not submit such a plan must be in compliance by June 1, 1973.

(b) (4) Fuel merchants must comply with subdivision 22a-174-19 (a) (2) by September 1, 1972, and fuel users must comply with that section by April 1, 1973.

(b) (5) Paint merchants must comply with subdivision 22a-174-20 (g) (1) by January 1, 1974, and paint users must comply with subdivisions 22a-174-20 (g) (2) and (g) (3) by January 1, 1975.

(b) (6) The owner or operator of a source subject to the requirements of subsections 22a-174-20 *(l)* through (r) must comply by October 1, 1980.

(b) (7) The owner or operator of a source subject to the requirements of subsections 22a-174-20 (s) through (w) must comply by October 1, 1981.

(c) (1) Any existing ''source'' required to comply with subdivision (b) (2) which is unable to comply by the date specified therein must submit to the ''Commissioner'' a proposed compliance plan and schedule by October 1, 1972, which plan must provide for compliance with appropriate regulations as expeditiously as practicable but not later than April 1, 1974.

(c) (2) The owner or ''operator'' of any ''source'' which cannot comply with the requirements of subdivision (b) (6) shall submit a compliance plan by July 1, 1980 which provides for compliance as expeditiously as practicable but not later than July 1, 1982.

(c) (3) The owner or ''operator'' of any ''source'' which cannot comply with the requirements of subdivision (b) (7) shall submit a compliance plan by July 1, 1981 which provides for compliance as expeditiously as practicable but not later than July 1, 1982.

(c) (4) Notwithstanding the provisions of subdivision (b) (7) the owner or ''operator'' of a ''source'' subject to the requirements of subsection 22a-174-20 (v) which has ''potential emissions'' of one hundred tons or less per year shall submit a compliance plan by July 1, 1984 which provides for compliance by July 1, 1985.

(c) (5) Notwithstanding the provisions of subdivisions (c) (2) and (c) (3) the ''Commissioner'' may accept a compliance plan with a final date of compliance not later than July 1, 1985 if the ''Commissioner'' determines by permit or order that the plan calls for new or innovative technology such as the use of low solvent coatings.

(d) Compliance plans and schedules pursuant to subdivision (b) (3) and (c) must:

(d) (1) be submitted on forms furnished or prescribed by the Commissioner;

(d) (2) set forth a proposed date for compliance with each applicable regulation; and

(d) (3) specify in detail the manner in which compliance will be achieved. Said schedule shall also include dates for achievement of increments of progress toward

compliance and provide for the source to verify completion of each increment to the Commissioner as it is achieved.

(e) The Commissioner may approve, approve with conditions or disapprove a proposed compliance plan and schedule. The Commissioner shall approve such plan and schedule if he determines that:

(e) (1) The source cannot comply with the regulation at any earlier time, even using the best available control technology, or cannot install such technology any earlier;

(e) (2) Adherence to such plan and schedule will not jeopardize the attainment or maintenance of a national standard by the required time;

(e) (3) The plan and schedule provide for the earliest possible compliance by the source; and

(e) (4) The plan and schedule provide for interim control measures to be taken before the compliance date.

(f) If the Commissioner rejects a proposed plan and schedule or portion thereof, then the source or sources involved must be in compliance with applicable regulations not later than October 1, 1980.

(g) All decisions of the Commissioner regarding a proposed plan and schedule shall be in writing and shall briefly state the basis for the decision.

(h) The commissioner shall issue periodic reports at intervals of not less than once a month, available on request to any interested party, which shall contain information regarding:

(h) (1) proposed compliance schedules received; and

(h) (2) determinations of the Commissioner regarding such schedules.

(i) Following submission to the Commissioner of a proposed compliance plan and schedule, any person may file written objections to the plan, in whole or in part, specifying the basis for those objections. The Commissioner may, at his discretion and after appropriate notice, hold public hearings upon proposed compliance plans and schedules.

(j) The commissioner shall, if petitioned by a minimum of twenty-five (25) persons or by an association having not less than twenty-five members, hold an investigative hearing once each calendar year beginning January 1, 1980 for the purpose of determining the feasibility of expanding the applicability of the provisions of subsection 22a-174-20 (cc) concerning alternative emission reduction plans for volatile organic compounds to other sections of these regulations to permit owners and operators of stationary sources to submit alternative emission reduction plans for other pollutants consistent with the requirements of the administrator. The hearing shall be conducted in accordance with section 22a-4-8 of the regulations of Connecticut state agencies.

(Effective February 1, 1989)

Sec. 22a-174-9. Prohibition of air pollution

(a) No person shall permit or cause air pollution, as defined in section 22a-174-1. This section applies to air pollutants not otherwise covered by these regulations.

(b) The owner or operator of any stationary source shall operate such source in accordance with all applicable emissions standards, standards of performance, and any other applicable requirements under Title 40 Code of Federal Regulations, Part 60, Standards of Performance for New Stationary Sources, or Part 61, National Emission Standards for Hazardous Air Pollutants, as from time to time may be

amended, which the Administrator has delegated to the Commissioner and which delegation the Commissioner has accepted.
(Effective November 29, 1983)

Sec. 22a-174-10. Public availability of information

(a) Any records, reports or other information obtained by the Commissioner or on file with the department shall, pursuant to the provisions of sections 1-7 through 20 of the General Statutes, as amended, be made available to the public. Upon a showing satisfactory to the Commissioner by any person that such records, reports or other information, or particular parts thereof (other than emission data), if made public, would divulge methods or processes entitled to protection as trade secrets of such person, the Commissioner shall consider such record, report or information, or particular part thereof, confidential, except that such record, report or information may be disclosed to other officers, employees, or authorized representatives of the state concerned with carrying out these regulations or when relevant in any hearing conducted by the Department of Environmental Protection or in any judicial proceeding, subject to such safeguards as the hearing officer or presiding judge may impose.

(b) Emission data shall not be entitled to protection as a trade secret.

(c) Any emission data made public by the Commissioner shall be presented in such a manner as to show the relationship between measured amounts under applicable emission limitations and compliance schedules or other measures.

(d) The Commissioner, when he deems it appropriate, may require a nominal charge to defray the costs of reproducing any requested information.
(Effective August 1, 1983)

Sec. 22a-174-11. Prohibition against concealment or circumvention

(a) No person shall install or cause the installation or use of any device or any means which, without resulting in reduction in the total amount of air pollutant emitted, conceals or dilutes an emission of air pollutant which would otherwise violate applicable regulations.

(b) Abatement of objectionable odors as defined in section 22a-174-23 by means of dilution or masking shall not be deemed a violation of this section, provided that any masking odor used shall not itself violate section 22a-174-23 or create a nuisance.
(Effective August 1, 1983)

Sec. 22a-174-12. Violations and enforcement

(a) No person shall violate or cause the violation of any applicable regulation.

(b) **Remedies for violations.** (1) The Commissioner shall designate employees of DEP to be known as enforcement personnel, who shall, acting with or without complaints, conduct investigations and ascertain whether the Commissioner's regulations are being complied with.

(2) Whenever the enforcement personnel determine that any regulation promulgated by the Commissioner has been violated or there has been a failure to comply therewith, they shall make and serve upon the person or persons responsible for the violations or failure a written order specifying the nature of the violation or failure and affording a reasonable period of time for its correction or remedying.

(3) Prior to the issuance of such order, the enforcement personnel shall make reasonable effort in the light of all circumstances to correct the violation or failure of compliance by conference, conciliation and persuasion, as required by statute.

(4) Unless the person or persons against whom an order has been served files a written answer thereto with the Commissioner, within thirty (30) days after the date

of service of the order, and requests a hearing thereon, such order shall become final and effective. The answer shall contain a clear and concise statement of the reason or reasons, if any, that the order is claimed to be invalid or insufficient and/or the manner in which the persons filing the answer deem themselves aggrieved by the order. Upon receipt of the answer and request for a hearing, the Commissioner shall schedule the hearing as soon thereafter as is practical before himself or a designated hearing officer to act in his place and stead. The person designated to act as hearing officer shall not have participated in any way in the investigation or other preliminary proceedings preceding the issuance of the order specifying the violation. The hearing shall be open to the public and shall be conducted in the manner provided by statute, to wit: Testimony shall be under oath and recorded stenographically or by a sound-recording device, but strict rules of evidence of courts of law shall not be binding on the hearing officer. True copies of the transcript and of any other record made by or at such hearing shall be furnished a party or any other person requesting them at his own expense. During the course of a hearing, the hearing officer may take appropriate measures to preserve the confidentiality of trade secrets.

(5) Any person who receives a notice that a permit has been denied, revoked or modified, or only conditionally approved may deem the notice a written order of violation under subsection (b) (2) and file a written answer and request for a hearing under subsection (b) (4).

(6) At the conclusion of a hearing held under subsection (b) (4) or (b) (5) and after reviewing the hearing record and the recommendation and report of the hearing officer, if any, the Commissioner shall determine whether the person or persons against whom such order has been issued is violating any regulation of the Commissioner, or has failed to comply with a proper requirement, order, notice, ruling or directive duly issued, or has improperly had a permit denied, revoked, or modified, or conditionally approved, and he shall affirm, modify, reverse or revoke the order, notice or other action complained of as he shall in his discretion determine, and shall so notify such person or persons by certified mail. Any information as to secret processes or methods shall be kept confidential.

(c) Any person who violates an order of the Commissioner shall be liable for a civil penalty not to exceed five thousand dollars ($5,000) per week commencing the 10th day after expiration of the time fixed for the taking of preventative or corrective measures, although the Commissioner in his discretion may waive such accrual in whole or in part. The penalty may be collected in a civil action in the manner provided by statute. In addition, the Commissioner may institute a civil action in any court of competent jurisdiction for injunctive relief to prevent any further violations of an order.

(d) (1) **Emergencies.** Notwithstanding any other provision of these regulations, if the Commissioner determines that an air pollution emergency exists caused by adverse meteorological conditions, such as an inversion or a stagnant high pressure system, which requires immediate action to protect public health or safety, he may order any person emitting or responsible for the emission of air pollutants or contaminants creating or contributing to the emergency, to reduce or discontinue such actions immediately. Upon the issuance of such order, the Commissioner shall fix a place and time, not later than forty-eight hours thereafter, for a hearing to be held before him or a hearing officer designated by him. Not more than twenty-four hours after the conclusion of such hearing, and without adjournment thereof, the Commissioner shall affirm, modify or set aside his order. Nothing contained in this

regulation shall be deemed a waiver of the Commissioner's powers to seek immediate injunctive relief in the courts against a person responsible for emission of pollutants in an emergency.

(d) (2) Any person who violates an order issued during and/or related to an air pollution emergency shall be liable for a civil penalty of five thousand dollars ($5,000) per week commencing with the date of notice to such person of issuance of the order.

(e) **Criminal liability.** Any person who files any statement, record or report with the Commissioner containing false or misleading information or other claims shall be subject to criminal prosecution for a Class A misdemeanor punishable by imprisonment for a period of up to one year and a fine of up to one thousand dollars ($1,000) for each violation.

(f) **Progress report requirements.** (1) Requirement, time, form. Any person against whom a final order has been issued shall submit progress reports as required and prescribed by the terms of the order. Such progress reports shall be submitted in such a form as the Commissioner prescribes.

(f) (2) Contents. Progress reports shall contain a separate declaration for each required step of an order's compliance timetable, stating either that compliance with the step is on schedule, or that compliance with the step is off-schedule. Progress reports declaring that compliance is proceeding on-schedule shall contain a concise but comprehensive description of (1) the action completed on each and every step required by the order during the time period covered by the report, and (2) the date or dates on which compliance with such step or steps was completed. Progress reports declaring that compliance is proceeding off-schedule shall contain a concise but comprehensive description of (1) the specific reasons for the tardiness, (2) the current state of completion, and (3) the special action which will be taken to return ''on-schedule'' by the date of the next progress report. Progress reports shall contain such other information as the Commissioner may require by the terms of a final order.

(f) (3) Proof of compliance. Progress reports shall include the name and address of any vendor whose goods were ordered for compliance purposes since the prior progress report. Where the terms of an order reported upon require the purchase of any material, service or equipment, progress reports shall include copies of the purchase order or orders. The Commissioner may require such other proof as he deems necessary to determine the progress and degree of compliance.

(f) (4) Verification of contracted work. Progress reports shall include the name and address of any consultants, subcontractors, or other agents employed under the terms of the order since the prior progress report together with a concise but comprehensive description of the actions they are to take to assist in compliance with the orders. Whenever any vendor, consultant, subcontractor or other agent is undertaking any activity regarding any step in the order, the progress report shall include a verification by the person under order that the vendor, consultant, subcontractor, or other agent is proceeding on-schedule.

(f) (5) Liability. Any person required to submit progress reports shall be liable for failure to meet any of the requirements of this section notwithstanding any delegation of responsibility to an agent to complete and submit reports. Any person who files a progress report containing false or misleading information or other claims shall be subject to criminal prosecution pursuant to section 53a-157 of the General Statutes.

(Effective August 1, 1983)

Sec. 22a-174-13. Variances

(a) Any person who owns or operates any source of air pollutants as defined in section 22a-174-1 may apply to the Commissioner for a variance or a partial variance from one or more of the provisions of these regulations. Applications for a variance shall be submitted on forms furnished or prescribed by the Commissioner and shall supply such information as he requires, including but not limited to,

(1) information on the nature and location of the facility or process for which such application is made;

(2) the reasons for which the variance is required, including the economic and technological justifications;

(3) the type and quantity of emissions that will occur during the period of variance;

(4) a description of interim control measures to be taken by the source to minimize emissions and the damages occurring therefrom;

(5) history of any previous environmental litigation between the source and government agencies;

(6) a specific schedule of measures to be taken to bring the source into eventual compliance with those regulations from which the variance is sought;

(7) any other relevant information the Commissioner may require in order to make a determination regarding the application.

(b) Failure to supply all necessary information to enable the Commissioner to make a determination regarding the application shall be cause for rejection of the application.

(c) No variance shall be approved unless the applicant shall establish to the Commissioner's satisfaction that:

(1) discharges occurring during the period of variance will not constitute a danger to public health or safety;

(2) compliance with the regulations would produce practical difficulty or hardship without equal or greater benefits to the public.

(d) In making a determination on granting a variance, the Commissioner shall consider:

(1) the character and degree of injury to, or interference with, safety, health, or the reasonable use of property which is caused or threatened to be caused;

(2) the social and economic value of the activity for which the variance is sought;

(3) the suitability or unsuitability of the activity to the area in which it is located;

(4) the impracticability, both scientific and economic, of complying with the regulation from which the variance is sought.

(e) The Commissioner shall not grant any variance that will prevent or interfere with the attainment or maintenance of any relevant ambient air quality standard.

(f) Applications for variances may be rejected as untimely if received by the Department of Environmental Protection less than 90 days prior to the date for compliance with the regulation for which the variance is sought, or if notice of violation of the regulation has been served in accordance with section 22a-174-12 (b) (2).

(g) Following receipt and review of an application for a variance, the Commissioner shall fix a date, time, and location for a public hearing on such application.

(h) The Commissioner shall cause the applicant to publish at his own expense all notices of hearings and other notices required by law.

(i) Within sixty (60) days of the receipt of the record of the hearing on a variance application, the Commissioner shall issue his determination regarding such applica-

tion. All such decisions of the Commissioner shall be in writing and shall briefly set forth the reasons for the decision.

(j) The Commissioner may, at his discretion, limit the duration of any variance granted under these regulations, except that no such variance may extend beyond three years.

(1) Any party holding a variance for three years and needing an extension of time may apply for a new variance under the provisions of these regulations.

(2) Any such application shall include a demonstration of compliance with any conditions imposed under the previous variance.

(k) The Commissioner may attach to any variance any reasonable conditions he deems necessary or desirable, including but not limited to:

(1) requirements for special control measures to be taken by the source to minimize emissions during the period of variance;

(2) requirements for periodic reports submitted by the applicant relating to emissions, to compliance with any other conditions under which the variance is granted, or to any other relevant information the Commissioner deems necessary.

(*l*) (1) A variance may be revoked or modified for failure to comply with such conditions as the Commissioner may have attached to the original grant of a variance.

(*l*) (2) Notice of revocation or modification shall set forth the reasons for the action taken and shall be effective thirty (30) days after the date of service of the notice, unless a hearing is requested prior to the expiration of the thirty (30) day period.

(*l*) (3) Any person considering himself aggrieved by such notice may consider the notice a written order of violation under section 22a-174-12 (b) (2) and may obtain a hearing thereon by filing a written answer and request for a hearing in accordance with section 22a-174-12 (b) (4). Filing of the answer and request for the hearing shall postpone the effective date of the notice until conclusion of hearing and issuance of the decision of the Commissioner.

(Effective August 1, 1983)

Sec. 22a-174-14. Compliance with regulation no defense to nuisance claim

(a) Nothing in any portion of these regulations shall in any manner be construed as authorizing or legalizing the creation or maintenance of a nuisance, and compliance of a source with these regulations is not a bar to a claim of nuisance by any person.

(Effective August 1, 1983)

Sec. 22a-174-15. Severability

(a) If any provision of these regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or application of any other part of these regulations which can be given effect without the invalid provisions or application, and to this end the provisions of these regulations and the various applications thereof are declared to be severable.

(Effective August 1, 1983)

Sec. 22a-174-16. Responsibility to comply with applicable regulations

(a) Exemption from requirements for registration or permits or possession of a permit to construct or operate or of a variance or approval of a compliance schedule shall not relieve any person of the responsibility to comply with any other applicable regulations or other provisions of federal or state law.

(Effective August 1, 1983)

Sec. 22a-174-17. Control of open burning

(a) **Definitions.** As used in subsections (a) through (g) inclusive:

(i) ''Brush'' means shrubs, vegetation, or prunings the diameter of which is not greater than three inches at the widest point.

(ii) ''Designee'' means any person employed by the department of environmental protection and designated by the Commissioner.

(iii) ''Fireman (Firemen)'' means any person whose full-time occupation is fighting fires or who engages in fire fighting under the immediate supervision of a person whose full-time occupation is fighting fires.

(iv) ''Open burning official'' means any person designated and certified by the Commissioner pursuant to subsection (g) of this section.

(v) ''Resident'' means an individual seeking to burn on the property where he resides.

(b) **Certificate for open burning.** (b) (1) Certificates under this regulation shall not be required for the following fires:

(i) Barbecues or other outdoor open fires for the cooking of food for human consumption;

(ii) Campfires, bonfires, and other fires for ceremonial or recreational purposes;

(iii) Fires to abate an immediate fire hazard provided that the abatement fire is supervised by a responsible fire official;

(iv) Fires for training firemen in methods of fighting fires, where only liquid fuels are burned;

(v) Fires in salamanders or other similar devices used by construction or other workers for heating purposes, which fires are essential to street installation or paving activities, the repairing of utilities, or other similar work.

(b) (2) The Commissioner, or his designee or the certified open burning official may issue, subject to the provisions of subsection (e), a certificate for the following fires:

(i) Fires for the prevention, control, or destruction of diseases and pests, and agricultural burning for vegetation management.

(ii) Fires by any resident to dispose of brush on the property where he resides.

(b) (3) The commissioner or his designee may issue, subject to the provisions of subsection (e), a certificate for the following fires:

(i) Fires for the disposal of dangerous material such as toxic gases, where there is no reasonable alternative method.

(ii) Fires to thwart a hazard which cannot properly be managed by any other means or is necessary for the protection of public health.

(iii) Fires in salt water marshes.

(iv) Fire-training exercises, other than those subject to (b) (1) (iv). In reviewing any application for such a certificate the provisions of section (d) (iv) shall not be applied.

(v) Any other fires not specified in subsection (b) (2).

(c) **Applications for open burning certificates.** (c) (1) Except as specified in subsection (b) (1), no person shall set, cause or permit an open fire without obtaining an open burning certificate from the Commissioner, or his designee or the certified open burning official.

(c) (2) A permit application for any fire described in subsection (b) (2) or (b) (3) shall be made by the applicant on forms furnished by the Commissioner, and each application shall describe the purpose of the fire, the nature and quantity

of the material to be burned, and such other information as the Commissioner may require.

(c) (3) A certificate issued under this subsection shall be applicable only for the occasion or the purpose for which it has been obtained.

(d) **Standards for open burning certificates.** The Commissioner, or his designee or the certified open burning official, shall not issue a certificate requested under subsection (c) when he determines that:

(i) A hazardous health condition will be created by such burning; or

(ii) The fire constitutes a salvage operation by open burning; or

(iii) A practical and alternative method for the disposal of the material to be burned exists, including but not limited to, the following techniques: chipping, cutting for forest products, landfilling, piling for protective cover for wildlife and stockpiling (not applicable to burning of brush as specified in subsection (b) (2) (ii)); or

(iv) Such open burning would interfere with or prevent the attainment or maintenance of a relevant ambient air quality standard; or

(v) The forest fire danger, as determined by the state forest fire warden, is high or extreme and the area is within 100 feet of a woodland or grassland.

(vi) An advisory of an air pollution emergency episode stage is in effect pursuant to Section 22a-174-6 of these regulations.

(vii) Garbage, paper, grass, metals, plastics, leaves, rubber, painted materials or demolition waste is to be burned.

(e) **Conditions on open burning certificates.** Certificates approved under subsection (c) shall be subject to such reasonable conditions as are necessary to avoid a nuisance or to protect the health, safety, or comfort of the public, including but not limited to, the following:

(i) Only materials and quantities specified on the certificate may be burned;

(ii) The Commissioner may specify on any permit the hours and days during which open burning is allowed.

(iii) Except for fire training exercises, burning shall only be permitted on sunny or partly sunny days when wind speed is 5 to 15 miles per hour;

(iv) A copy of the certificate shall be kept in the possession of the applicant at the burning site at all times during the burning;

(v) The Commissioner or his designee or the open burning official may revoke in writing any certificate or add any reasonable, specifically identified conditions if circumstances indicate that air pollution standards will be violated.

(f) **Effect on local ordinances.** These regulations do not preclude a municipality from prohibiting or attaching any more stringent conditions to any open burning.

(g) **Certified open burning officials.** The Commissioner may establish and maintain a program for the training of local open burning officials. A local open burning official shall be nominated only by the chief executive officer of the municipality in which the official will serve. Nomination of the local open burning official entitles him to participate in the training program. The Commissioner may certify as local open burning official any person properly nominated who successfully completes the training program. Between training programs and upon approval by the Commissioner, a nominated official may serve in a temporary capacity. The nomination may be revoked by the chief executive of the municipality in which the local open burning official serves according to local practice, procedure, custom or ordinance.

(Effective August 1, 1983)

Sec. 22a-174-18. Control of particulate matter and visible emissions

(a) **Definitions.** For the purposes of this section, the following definitions shall apply:

(1) ''Calendar quarter'' means a consecutive three (3) month period (non-overlapping) beginning on January 1, April 1, July 1 or October 1;

(2) ''Flue-fed incinerator'' means an incinerator with a single flue that serves as both the charging chute and the flue to transport combustion products to the atmosphere;

(3) ''Incinerator'' means, notwithstanding Section 22a-174-1 of the Regulations of Connecticut State Agencies, any device, apparatus, equipment or structure used for destroying, reducing or salvaging by fire any material or substance, including but not limited to, refuse, rubbish, garbage, trade waste, debris or scrap, or facilities for cremating human or animal remains;

(4) ''One-minute block average'' means, for measurements taken at a source using opacity CEM equipment, the average of six (6) or more data points equally spaced over one minute; and, for measurements taken using 40 CFR 60, appendix A, reference method 9, the average of four or more data points equally spaced over a one minute period;

(5) ''Shutdown'' means the period of time beginning when the owner or operator of a stationary source initiates the process of ceasing the operation of such source and ending when operation thereof has completely ceased;

(6) ''Six-minute block average'' means, for measurements taken at a source using opacity CEM equipment, the average of thirty-six (36) or more data points equally spaced over a six (6) minute period; and, for measurements taken using 40 CFR 60, appendix A, reference method 9, the average of twenty-four or more data points equally spaced over a six (6) minute period;

(7) ''Stationary reciprocating internal combustion engine'' means any spark ignited or compression ignited engine that is also a stationary source as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies; and

(8) ''Startup'' means the time beginning when the owner or operator of a stationary source initiates the process of setting such source into operation.

(b) **Visible emission standards.**

(1) Stationary sources without opacity CEM equipment. Except as provided in subsection (j) of this section, an owner or operator of any stationary source without opacity CEM equipment for which opacity is measured using visual observation shall not exceed the following visible emissions limits:

(A) twenty percent (20%) opacity during any six-minute block average as measured by 40 CFR 60, appendix a, reference method 9; or

(B) forty percent (40%) opacity as measured by 40 CFR 60, appendix a, reference method 9, reduced to a one-minute block average.

(2) Stationary sources with opacity CEM equipment. Except as provided in subsection (j) of this section, an owner or operator of a stationary source for which opacity is measured using opacity cem equipment shall not exceed the following visible emissions limits:

(A) twenty percent (20%) opacity during any six-minute block average; or

(B) forty percent (40%) opacity during any one-minute block average.

(3) Mobile sources. Except as provided in subsection (j) of this section, no person shall cause or allow:

(A) any visible emissions from a gasoline powered mobile source for longer than five (5) consecutive seconds;

(B) visible emissions from a diesel powered mobile source of a shade or density equal to or darker than twenty percent (20%) opacity for more than ten (10) consecutive seconds, during which time the maximum shade or density shall be no darker than forty percent (40%) opacity; or

(C) a mobile source to operate for more than three (3) consecutive minutes when such mobile source is not in motion, except as follows:

(i) when a mobile source is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control,

(ii) when it is necessary to operate defrosting, heating or cooling equipment to ensure the safety or health of the driver or passengers,

(iii) when it is necessary to operate auxiliary equipment that is located in or on the mobile source to accomplish the intended use of the mobile source,

(iv) to bring the mobile source to the manufacturer's recommended operating temperature,

(v) when the outdoor temperature is below twenty degrees Fahrenheit (20 degrees F),

(vi) when the mobile source is undergoing maintenance that requires such mobile source be operated for more than three (3) consecutive minutes, or

(vii) when a mobile source is in queue to be inspected by U.S. military personnel prior to gaining access to a U.S. military installation.

(c) **Control of airborne particulate matter and fugitive particulate matter.**

(1) No person shall cause or allow any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall be in accordance with good industrial practice as determined by the commissioner and shall include, but not be limited to:

(A) the use of water or other appropriate material to prevent airborne particulate matter generated by the demolition of buildings or other structures; construction operations; the clearing or grading of land; or the grading, construction or improvement of roads;

(B) the application of asphalt, water, suitable materials or covers to material stockpiles and other surfaces that can give rise to airborne particulate matter;

(C) the use of hoods, fans, fabric filters or other devices to enclose and vent the handling of materials that can give rise to airborne particulate matter;

(D) the covering, while in motion, of open-bodied trucks, open-bodied trailers and railroad cars transporting materials capable of giving rise to airborne particulate matter;

(E) the prompt removal of earth or other material deposited onto paved streets by trucking, earth moving equipment, erosion or other means; and

(F) the use of containment methods for sandblasting or similar operations.

(2) No person shall cause or allow the emission of visible particulate matter beyond the legal boundary of the property on which such emission occurs that either:

(A) remains near ground level beyond such property boundary; or

(B) diminishes the health, safety or enjoyment of people using a building or structure located beyond the property boundary.

(3) No person shall emit particulate matter into the ambient air in such a manner as to cause a nuisance.

(d) **Emission standards for incinerators and prohibitions on flue-fed incinerators.**

(1) No owner or operator shall cause or allow the construction, installation or operation of a flue-fed incinerator.

(2) Particulate matter emission standards for incinerators. No owner or operator shall cause or allow the operation of any incinerator that will result in particulate matter emissions in excess of the particulate matter emission standards set forth in subparagraph (A) or (B) of this subdivision:

(A) for incinerators for which construction or modification commenced on or after July 1, 1979, 0.08 grains per standard cubic foot corrected to twelve percent (12%) carbon dioxide (CO_2) over a two (2) hour average or 0.18 grams per cubic meter corrected to twelve percent (12%) carbon dioxide (CO_2) over a two (2) hour period; and

(B) for incinerators for which construction or modification commenced prior to July 1, 1979, 0.4 pounds of particulate per thousand pounds of flue gases adjusted to fifty percent (50%) excess air.

(3) Visible and fugitive emission standards for incinerators. No owner or operator of any incinerator shall cause or allow unburned waste or ash particulate emissions that are individually discernible by the human eye measured using 40 CFR 60, appendix A, reference method 9 and 40 CFR 60, appendix A, reference method 22.

(e) **Particulate matter emission standards for fuel-burning equipment.**

(1) The owner or operator of fuel-burning equipment subject to Section 22a-174-3a or former Section 22a-174-3 of the Regulations of Connecticut State Agencies shall emit no more than 0.10 pounds of particulate matter per million BTU of heat input or the particulate matter standard of a permit applicable to such equipment, whichever is more stringent.

(2) The owner or operator of fuel-burning equipment subject to former section 22a-174-2 of the Regulations of Connecticut State Agencies shall emit no more than the following particulate matter levels:

(a) 0.14 pounds of particulate matter per million BTU of heat input if the fuel burned is residual oil (No. 4 or No. 6 oil);

(B) 0.12 pounds of particulate matter per million BTU of heat input if the fuel burned is distillate oil (No. 2 oil);

(C) 0.10 pounds of particulate matter per million BTU of heat input if the fuel burned is natural gas; or

(D) 0.20 pounds of particulate matter per million BTU of heat input for any other fuel burned.

(3) Notwithstanding subdivisions (1) and (2) of this subsection and except as provided in subsection (j) of this section, the owner or operator of a stationary reciprocating internal combustion engine with a maximum continuous brake horsepower output rating, as specified by the manufacturer, greater than or equal to 175 brake horsepower (bhp), shall emit no more than:

(A) 0.10 pounds of particulate matter per million BTU of heat input or combust only fuel with a sulfur content less than or equal to 0.05% by weight, if the stationary reciprocating internal combustion engine was manufactured prior to or in model year 1996; or

(B) 0.10 pounds of particulate matter per million BTU of heat input if the stationary reciprocating internal combustion engine was manufactured after model year 1996.

(f) **Process industries—general.**

(1) For the purposes of this subsection, the provisions of subparagraphs (A) through (D) shall apply:

(A) ''process weight'' means the total weight, in pounds, of all materials introduced into any specific process that may cause the emission of particulate matter, including solid fuels used in such process for purposes other than combustion and excluding combustion air, and liquid fuels, solid fuels and gaseous fuels burned;

(B) ''process weight rate'' means the process weight for any specific process measured over a one (1) hour time period;

(C) the process weight rate of a cyclical or batch operation is derived by dividing the process weight by the number of hours in one complete operation of the process, excluding any time during which the equipment is idle; and

(D) the process weight rate of a continuous operation is derived by dividing the process weight for a time period of operation by the length of that period of time.

(2) Except as provided in subsection (g) of this section, no owner or operator of a process industry source shall cause or allow the emission of particulate matter to the ambient air in any one hour from such source in excess of the emission rate calculated as required by subdivisions (3) and (4) of this subsection.

(3) To mathematically interpolate from Table 18-1 process weight rates up to and including sixty thousand pounds per hour (60,000 lbs/hr), the following equation shall be used:

$$LOG\ E = LOG\ 3.59 + 0.62 \times \left(LOG\ \frac{P}{2000} \right)$$

WHERE: P = Process weight rate in pounds per hour
E = Maximum allowable Emission rate in pounds per hour
LOG = The natural logarithm of the indicated value

(4) To mathematically interpolate and extrapolate from Table 18-1 process weight rates in excess of sixty thousand pounds per hour (60,000 lbs/hr), the following equation shall be used:

$$LOG\ E = LOG\ 17.31 + 0.16 \times \left(LOG\ \frac{P}{2000} \right)$$

WHERE: P = Process weight rate in pounds per hour
E = Maximum allowable emission rate in pounds per hour
LOG = The natural logarithm of the indicated value

(5) To determine compliance with the requirements of this subsection, an interpretation resulting in the lowest allowable emission rate shall apply if the nature of any process or operation, or the design of any process unit, allows multiple interpretations.

(6) To determine the maximum allowable emission rate in accordance with this subsection for emissions that pass through a stack or stacks at a premises containing several similar process units, the total process weight shall include all such similar process units.

(7) To determine the maximum allowable emission in accordance with this subsection for a premises utilizing a series of operations that employ combinations of machines or other devices to process material, either continuously or in batches, the total process weight for such premises shall be the weight of all materials that may

cause particulate matter emissions and are introduced into the series of operations, excluding all material that is the desired end product of any such series of operations.

Table 18-1. Interpolation/Extrapolation Table for Determining Particulate Matter Emission Rates and Process Weight Rates for Process Industries—General

Process Weight Rate (Pounds per hour)	Emission Rate (Pounds per hour)
50	0.36
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

(g) **Process industries—specific.**

(1) Iron foundry cupola. For the purposes of this subdivision, ''iron foundry cupola'' means a furnace used in the iron foundry industry that uses coke, a derivative of coal, as fuel. No owner or operator shall cause or allow the operation of any iron foundry cupola unless:

(A) particulate matter control measures and/or control equipment remove at least ninety percent (90%) by weight of all particulate matter in the cupola discharge gases, or particulate matter emissions are less than or equal to 1.7 pounds of particulate matter per ton of iron produced, whichever practice or combination of practices results in the lowest particulate matter emissions; and

(B) gases, vapors and gas-entrained effluents from such cupolas are incinerated at a minimum temperature of one thousand three hundred (1300) degrees Fahrenheit for a period of not less than three-tenths (0.3) of a second.

(2) Hot mix asphalt plant. No owner or operator shall cause or allow the operation of any hot mix asphalt plant unless:

(A) particulate matter emissions are less than 0.10 pounds of particulate matter per ton of asphalt produced; and

(B) the operation conforms to the requirements set forth in subsection (c) of this section.

(3) Foundry sand process. No owner or operator shall cause or allow the operation of a foundry sand process unless:

(A) particulate matter control measures and/or control equipment remove at least ninety percent (90%) of all airborne particulate matter from such process, or particulate matter emissions are less than 0.75 pounds of particulate matter per ton of material cast, whichever practice or combination of practices results in the lowest particulate matter emissions; and

(B) the operation conforms to the requirements set forth in subsection (c) of this section.

(4) Concrete batching process. No owner or operator shall cause or allow the operation of a concrete batching process unless:

(A) particulate matter control measures and/or control equipment remove at least ninety percent (90%) of all airborne particulate matter or 0.02 pounds of particulate matter per cubic yard of concrete, whichever practice or combination of practices results in the lowest particulate matter emissions; and

(B) the operation conforms to the requirements set forth in subsection (c) of this section.

(h) **Control technology determinations.**

To implement a control techology determination made by the commissioner, the commissioner may modify or revise a permit or issue an order to the owner or operator of a stationary source for which construction or major modification commenced after June 1, 1972 that requires more stringent emissions limitations than those set forth in subsections (b)(1) and (b)(2) of this section if such control technology determination does not result in a violation of the applicable provisions of 40 CFR 52, 60, 61, 62 or 63.

(i) **Hazardous air pollutants.**

Nothing in this section shall be construed to relieve an owner or operator from complying with all emissions limitations for hazardous air pollutants, hazardous materials or other hazardous substances.

(j) **Excepted activities.**

(1) The owner or operator of a stationary source shall not be subject to the visible emissions standards of subdivision (b)(2) of this section for measurements of opacity using opacity CEM equipment during a period of startup, shutdown or malfunction; commissioner-approved stack testing; or intentional sootblowing, fuel switching or sudden load changing done in accordance with good engineering practices provided that:

(A) the owner or operator is required by permit, order or regulation to install, operate and maintain opacity CEM equipment at such stationary source, and the owner or operator is in compliance with such permit, order or regulation with regard to such opacity CEM equipment. if a stationary source is not subject to a permit, order or regulation requiring operation and maintenance of opacity CEM equipment, an owner or operator may certify on a form acceptable to the Commissioner that:

(i) the owner or operator of such stationary source has installed opacity CEM equipment that meets the applicable criteria of 40 CFR 60, Appendices B and F, and

(ii) the owner or operator operates and maintains such installed opacity cem equipment in compliance with the requirements of 40 CFR 60, Appendices B and F;

(B) the period of exception from the visible emissions standards of subdivision (b)(2) of this section does not exceed one-half of one percent (0.5%) of the total operating hours of such stationary source during any calendar quarter; and

(C) the owner or operator of the stationary source does not cause or allow visible emissions in excess of sixty percent (60%) opacity during any six-minute block

average of the period of exception from the visible emissions standards of subsection (b)(2) of this section.

(2) The owner or operator of an emissions unit that is subject to a visible emissions standard pursuant to a new source performance standard set forth in 40 CFR 60 shall not be subject to the visible emissions standards of subsections (b)(1) and (b)(2) of this section.

(3) Except for the use of open-bodied trucks and trailers subject to the requirements of subsection (c)(1)(d) of this section, a person engaged in agricultural operations shall be exempt from the requirements of subsection (c)(1) of this section provided such operations follow generally accepted agricultural practices and are in compliance with section 19a-341 of the Connecticut General Statutes.

(4) The owner or operator of any of the following sources shall be exempt from the requirements of subsection (b)(3) of this section:

(A) an antique mobile source over thirty years old;

(B) a mobile source used exclusively for racing;

(C) a mobile source while it is undergoing a mechanical repair or testing that affects the emission of visible air pollutants from such source;

(D) an aircraft;

(E) a locomotive operating on rails;

(F) a vessel operating on water; and

(G) commonly used residential lawn, garden and snow removal equipment.

(5) The operation of equipment to generate smoke or fog by any branch of the United States military or any other federal or state agency shall be exempt from the requirements of subsections (b) and (e) of this section provided such operation is limited to training exercises or the preparation thereof.

(6) The owner or operator of any stationary reciprocating internal combustion engine that is an emergency engine, as defined in subsection (a)(2) of section 22a-174-22 of the Regulations of Connecticut State Agencies and has a maximum continuous brake horsepower output rating, as specified by the manufacturer, greater than or equal to 175 bhp shall not be subject to the particulate matter emissions standards of subsection (e) of this section.

(7) The owner or operator of a stationary reciprocating internal combustion engine with a maximum continuous brake horsepower output rating, as specified by the manufacturer, of less than 175 bhp shall not be subject to the requirements of subsection (e) of this section.

(8) The requirements of subsections (e), (f) and (g) of this section shall not apply to the owner or operator of a source subject to more stringent bact requirements, provided that the source is operated in compliance with a BACT determination.

(9) A person conducting open burning pursuant to section 22a-174(f) of the Connecticut General Statutes or regulations adopted thereunder shall not be subject to the requirements of this section.

(10) If the owner or operator of a source possesses documentation demonstrating that the presence of uncombined water, such as water vapor, is the only reason for the failure of an emission to comply with the requirements of this section, then the provisions of this section shall not apply to that emission.

(11) The owner or operator of a municipal waste combustor as defined in Section 22a-174-38 of the Regulations of Connecticut State Agencies shall be exempt from the requirements of this section.

(Effective August 1, 1983; amended April 1, 2004)

Sec. 22a-174-19. Control of sulfur compound emissions

(a) **Fuel combustion.** (a) (1) Definitions. As used in subsections (a) through (f) inclusive:

''Combustible'' means the heat-producing constituents of a fuel.

''Combustion'' means the rapid chemical combination of oxygen with the combustible element of a fuel resulting in the production of heat.

''Fuel'' means a substance containing combustibles used for producing heat, light, power or energy.

''Fuel merchant'' means any person who offers for sale or sells, transfers, or provides in retail or wholesale trade, fuel, including agents, brokers, wholesalers, distributors, or producers who sell commercial or non-commercial fuel.

''Fuel user'' means any person who stores or utilizes commercial or non-commercial fuel for the purpose of creating by combustion heat, light, power, or energy.

''Gross heat input'' means the total energy requirement for a premise for twelve (12) consecutive months.

''Heat input'' means the actual firing rate of the fuel burning equipment.

''Premise'' means the grouping of all air pollutant emitting activities or sources at any one location and owned or under the control of the same person or persons.

''Stack'' or ''chimney'' means a flue, conduit or opening permitting particulate or gaseous emission into the open air, or constructed or arranged for such purpose.

''Sulfur dioxide (SO_2)'' means a colorless gas at standard conditions which has the molecular formula SO_2.

''Sulfur oxides (SO_x)'' means any compound made up only of sulfur and oxygen which for the purpose of this regulation will be calculated as sulfur dioxide (SO_2).

(a) (2) Fuel users

(a) (2) (i) No person, except as provided in subparagraphs (a) (2) (ii), (a) (3) (i) and (a) (3) (ii), shall use or burn fuel which contains sulfur in excess of a maximum of one percent (1.0%) by weight (dry basis). Additionally, no fuel user shall cause or permit the installation or operation of any fuel burning equipment with a heat input of 250,000 BTU per hour or more which uses fuel containing any solid fuel without first obtaining the Commissioner's approval by the issuance of a stationary source operating permit for this purpose, unless the fuel user demonstrates to the Commissioner's satisfaction that the emissions of sulfur compounds (expressed as sulfur dioxide) from such equipment are 1.1 pounds per million BTU of heat input or less.

(ii) Under conditions of fuel shortage emergency, as determined by the Commissioner, higher percentages of sulfur may be permitted by express approval of the Commissioner for temporary periods.

(a) (3) Use of fuel containing other than one percent (1%) sulfur.

(a) (3) (ii) Air pollution control/energy trade program. Notwithstanding the provisions of subsection (a) (2), the Commissioner may approve: (i) combustion of a mixture of fuels, or (ii) combustion of a single fuel, which contain(s) more than one percent (1.0 percent) sulfur by weight (dry basis) provided that:

(A) The emissions of sulfur compounds (expressed as sulfur dioxide) from a given premise do not exceed 0.55 pounds per million BTU of gross heat input;

(B) The owner or operator of the premise applies for and obtains, prior to the burning of such fuel, a stationary source operating permit for this purpose; and

(C) The emissions do not prevent or interfere with either the attainment or maintenance of any applicable air quality standard.

(a) (3) (ii) Emission limitation. Notwithstanding the provisions of subdivision (a) (2) the Commissioner may approve the combustion of a single fuel or a mixture of fuels which contain(s) more than one percent (1%) sulfur by weight (dry basis) for any fuel burning equipment provided that the emissions of sulfur compounds (expressed as sulfur dioxide) from such equipment do not exceed 1.1 pounds per million BTU of heat input.

(a) (3) (iii) Ambient impact. Notwithstanding the provisions of subdivision (a) (2) or subparagraphs (a) (3) (i) and (ii) the Commissioner shall, by permit or order, limit the emission of sulfur compounds (expressed as sulfur dioxide) from any fuel burning equipment on a given premise to less than 1.1 pounds per million BTU of heat input for any source which interferes with the attainment or maintenance of any applicable air quality standard.

(a) (4) Fuel merchants

(a) (4) (i) No fuel merchant, except as provided in subparagraphs (a) (4) (ii) and (iii) shall store, offer for sale, sell, make available, deliver for use or exchange in trade for use in Connecticut fuel which contains in excess of one percent (1.0%) sulfur by weight (dry basis).

(a) (4) (ii) In other than conditions of fuel shortage emergency described under subsection (a) (2) (ii), fuel merchants seeking to store, offer for sale, sell, deliver for use or exchange in trade, for use in Connecticut, and fuel users seeking to create by combustion heat, light, power, or energy from fuels containing sulfur in excess of the maximums set by subsection (a) (2) under the conditions specified in subsection (a) (3) shall obtain the prior approval of the Commissioner.

(a) (4) (iii) The Commissioner may allow a fuel merchant to store, sell, or deliver fuel, which contains more than one percent (1%) sulfur by weight (dry basis) to any fuel user who has been authorized to use such fuel by:

(A) A variance pursuant to 22a-174-13; or

(B) A permit pursuant to 22a-174-3; or

(C) Approval pursuant to 22a-174-19 (a) (2) (ii); or

(D) Approval pursuant to 22a-174-19 (a) (3); or

(E) Authorization as a result of any other action taken by the Commissioner.

The Commissioner may take such action under this subparagraph without requiring any notice or hearing.

(a) (5) The Commissioner may require submission of fuel analyses, results of stack sampling, or both, prepared at the expense of the merchant or user, to ensure compliance with the provisions of subsections (a) (1) through (a) (7) inclusive, and no person shall fail to submit such data when requested to do so by the Commissioner.

(a) (6) Persons selling fuels in Connecticut shall maintain records of sales of all fuel containing sulfur and shall make these records available for inspection by the Commissioner or his representative during normal business hours. This section shall not apply to any of the following fuels which have sulfur contents below two-tenths of one percent (0.2%) by weight (dry basis): distillate oil, motor vehicle fuel, aircraft fuel, or gaseous fuel.

(a) (7) The provisions of subsections (a) (1) through (a) (6) inclusive shall not apply to fuels used by oceangoing vessels.

(a) (8) No person shall cause or permit the flaring or combustion of any refinery process gas stream or any other process gas stream that contains sulfur compounds measured as hydrogen sulfide in concentrations greater than 10 grains per 100 standard cubic feet (23 gm/100 scm) of gas.

(a) (9) (i) The provisions of subsections (a) (2) (i) above shall not apply to any coal burning equipment used primarily for educational or historical demonstrations or exhibits provided that the emissions from such fuel burning equipment do not interfere with either the attainment or maintenance of any applicable air quality standard. These sources shall include, but are not limited to, blacksmith's forges, steam locomotives, and steamboats, provided, however, that such sources do not use or burn fuel which contains sulfur in excess of one and one-half percent (1.5%) by weight (dry basis).

(ii) As a prerequisite for exemption under the provisions of subsections (a) (9) (i), owners shall notify the Commissioner prior to commencement of said operation.

(iii) The Commissioner may revoke or modify an exemption under subsection (a) (9) if he determines that operation of the source will (1) prevent or interfere with the attainment or maintenance of any applicable air quality air standards, or (2) create a substantial health problem.

(iv) All fuel merchants are authorized to sell fuel to any owner or operator granted an exemption pursuant to subsection (a) (9) above. In addition to the requirements of subsection (a) (7) above, all records shall include the sulfur content of the fuel.

(b) Sulfuric acid plants. No person shall cause or permit sulfur oxides emissions which exceed 6.5 pounds per ton (3.25 kg/ metric ton) of one hundred percent (100%) acid produced.

(c) Sulfur recovery plants. No person shall cause or permit the emission of sulfur oxides from a sulfur recovery plant to exceed 0.01 pounds (kg) per pound (kg) of sulfur processed.

(d) Nonferrous smelters. No person shall cause or permit the emission of sulfur oxides from primary non-ferrous smelters to exceed that set forth according to the following equations.

Copper smelters: $Y = 0.2\ X$

Zinc smelters: $Y = 0.564\ X^{0.85}$

Lead smelters: $Y = 0.98\ X^{0.77}$

Where X is the total sulfur fed to the smelter in lb/hr and Y is the allowable sulfur dioxide emissions in lb/hr.

(e) Sulfite pulp mills. No person shall cause or permit the total sulfite pulp mill emissions of sulfur oxides from blow pits, washer vents, storage tanks, digester relief, recovery system, etc., to exceed 9.0 pounds per air-dried ton (4.5 kg/metric ton) of pulp produced.

(f) **Other process sources.** Notwithstanding the provisions of Section 22a-174-18(f) of the Regulations of Connecticut State Agencies, process sources not covered in subsections (b) through (e) of this section shall not emit sulfur oxides (expressed as sulfur dioxide) in the stack effluent in concentrations which exceed 500 parts per million at standard temperature and pressure.

(Effective August 1, 1983; amended April 1, 2004)

Sec. 22a-174-19a. Control of sulfur dioxide emissions from power plants and other large stationary sources of air pollution

(a) **Definitions.** For purposes of this section:

(1) ''Affected state'' means ''affected states'' as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(2) ''Affected unit'' means a fossil-fuel fired:

(A) Stationary source that serves a generator with a nameplate capacity of 15 MW or more; or

(B) Boiler or indirect heat exchanger with a maximum heat input capacity of 250 MMBtu/hr or more.

(3) ''Average emissions rate'' means a determination of the rate of SO_2 emissions, measured in pounds of SO_2 per MMBtu, in any calendar quarter from either a single affected unit or from two or more affected units. Average emissions rate for a single unit is calculated by dividing the total quarterly SO_2 emissions, in pounds, from such unit by the total quarterly heat input, in MMBtu, for such unit. Average emissions rate for two or more units is calculated by dividing the total quarterly SO_2 emissions, in pounds, from all such units by the total quarterly heat input, in MMBtu, for all such units.

(4) ''Boiler'' means an enclosed fossil-or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam or other medium.

(5) ''Calendar quarter'' means the period of January 1 to March 31, inclusive, April 1 to June 30, inclusive, July 1 to September 30, inclusive or October 1 to December 31, inclusive.

(6) ''Connecticut State SO_2 Retirement Account'' means a general allowance tracking system account established by the commissioner under 40 CFR 73.31 for the purpose of permanently holding SO_2 allowances retired by the owners or operators of affected units in accordance with the provisions of subsection (d) of this section.

(7) ''Continuous emissions monitoring system'' or ''CEMS'' means any equipment used to sample, analyze and measure SO_2 emissions to provide a permanent record of such emissions expressed in pounds per MMBtu.

(8) ''Emissions unit'' means ''emission unit'' as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(9) ''Indirect heat exchanger'' means combustion equipment in which the flame or products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls, and that emits exhaust gases only through a stack. ''Indirect heat exchangers'' include, but are not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, pyrolysis heaters and fuel-fired reactors.

(10) ''MMBtu'' means million BTU of heat input.

(11) ''Retire'' or ''retirement'' when referring to SO_2 allowances, means the permanent withdrawal of SO_2 allowances by the Administrator from any allowance tracking system account to the Connecticut SO_2 Allowance Retirement Account in an amount equal to the number of tons of SO_2 emitted by each affected unit.

(12) ''Sulfur dioxide'' or ''SO_2'' means a gas that at standard conditions has the molecular form SO_2.

(13) ''Title IV SO_2 allowance'' or ''SO_2 allowance'' means an authorization allocated to a Title IV source by the Administrator, pursuant to Title IV of the federal Clean Air Act (42 USC 7651d, et seq.) and 40 CFR Parts 72 and 73, to emit up to one ton of SO_2 during or after a specified calendar year.

(14) ''Title IV source'' means an affected unit that is also subject to Phase II of the acid rain control requirements set forth in Title IV of the federal Clean Air Act (42 USC 7651d, et seq.).

(b) **Applicability.** This section shall apply to the owner or operator of any affected unit.

(c) **Sulfur dioxide emission standards and fuel sulfur limits effective on and after January 1, 2002.** On and after January 1, 2002 and except as provided in subsection (f) of this section, the owner or operator of an affected unit or units shall:

(1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.5 % sulfur, by weight (dry basis);

(2) Meet an average emission rate of equal to or less than 0.55 pounds SO_2 per MMBtu for each calendar quarter for an affected unit at the premises; or

(3) Meet an average emission rate of equal to or less than 0.5 pounds SO_2 per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at the premises.

(d) **Additional Emission Reduction Requirements.**

(1) No later than the following March 1, for each calendar year commencing January 1, 2002, the owner or operator of each affected unit that is also a Title IV source shall retire one SO_2 allowance, rounded up to the next whole ton, for each ton of SO_2 emitted in the state of Connecticut. This requirement is in addition to any other requirements imposed on the owner or operator of a Title IV source by the Administrator under 40 CFR Parts 72 and 73.

(2) The owner or operator of an affected unit shall retire the necessary amount of SO_2 allowances by requesting that the Administrator transfer such allowances to the Connecticut State SO_2 Retirement Account established by the commissioner pursuant to 40 CFR 73.31 and administered by the federal Environmental Protection Agency under the provisions of 40 CFR Parts 72 and 73. The transfer of SO_2 allowances in accordance with the provisions of this subdivision shall occur by March 1 for emissions occurring in the previous calendar year.

(3) Any SO_2 allowance retired in accordance with the provisions of this subsection shall be an allowance originally issued by the Administrator to a Title IV source located in the state of Connecticut or in any affected state.

(e) **Sulfur dioxide emissions standards and fuel sulfur limits effective on and after January 1, 2003.** Notwithstanding the provisions of subsection (b) of this section, this subsection shall apply, on and after January 1, 2003, to the owner or operator of a Title IV source that is also an affected unit or units. On and after January 1, 2003, such owner or operator shall:

(1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.3 % sulfur, by weight (dry basis);

(2) Meet an average emission rate of equal to or less than 0.33 pounds SO_2 per MMBtu for each calendar quarter for an affected unit at a premises; or

(3) Meet an average emission rate of equal to or less than 0.3 pounds SO_2 per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at a premises.

(f) **Reserved.**

(g) **Fuel Emergencies.**

(1) The commissioner may suspend the requirements of subsection (c) or (e) of this section for the owner or operator of any affected unit using a low-sulfur fuel. For the purposes of this subsection, a low-sulfur fuel is any solid, liquid or gaseous fuel with a sulfur content equal to or less than 0.5% by weight, dry basis. Such suspension shall be made only when the commissioner finds that the availability of fuel that complies with such requirements is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency.

(2) The commissioner shall specify in writing the period of time for which the suspension described in subdivision (1) of this subsection shall be in effect.

(3) No later than thirty days after the termination of any suspension of fuel sulfur limits made pursuant to this subsection, the owner or operator of an affected unit or units shall report to the commissioner in writing the amount of SO_2 emissions in excess of those that would have occurred had the use of compliant fuel at the affected source not been interrupted. If such excess SO_2 emissions from any premises exceed fifty tons, the commissioner may require that the owner or operator of such affected unit or units offset such SO_2 emissions.

(h) **Reserved.**

(i) **Record keeping.**

(1) The owner or operator of an affected unit who demonstrates compliance with this section by meeting the applicable fuel sulfur limits of subsections (c)(1) or (e)(1) of this section shall make and keep records in accordance with the following:

(A) If fuel with sulfur content not exceeding an applicable fuel sulfur limit is the only fuel purchased and combusted by an affected unit, then the owner or operator shall make and keep records that demonstrate the fuel sulfur content of each shipment of fuel received; or

(B) If fuel with sulfur content above any applicable limit is blended at the premises for combustion in an affected unit or units, the owner or operator shall make and keep daily records demonstrating that all fuel combusted at the affected unit or units meets the applicable fuel sulfur limits of subsection (c)(1) or (e)(1) of this section. Fuel sulfur analysis shall be conducted in accordance with the American Society for Testing and Material (ASTM) test method D4294 and automatic sampling equipment shall conform to ASTM test method D4177-82. (Copies of ASTM test methods D4294 and D4177-82 may be obtained from the Department of Environmental Protection, Bureau of Air Management, 79 Elm Street, 5th floor, Hartford, CT 06106-5127; (860) 424-3027).

(2) The owner or operator of an affected unit who demonstrates compliance with this section by meeting the average SO_2 emission rate limits of subsections (c)(2), (c)(3), (e)(2) or (e)(3) of this section shall make and keep records in accordance with the following:

(A) For affected units that are also Title IV sources, hourly SO_2 emission rate values determined from data measured by a CEMS in accordance with the applicable provisions of 40 CFR 75;

(B) For affected units that are not Title IV sources:

(i) hourly SO_2 emission rate values determined from data measured by a CEMS in accordance with the applicable provisions of either 40 CFR 60 or 75, or

(ii) if any affected unit does not have a CEMS in accordance with either 40 CFR 60 or 75, then hourly SO_2 emission rate values determined from data measured by a CEMS or other monitoring system; and

(C) For all affected units, quarterly facility SO_2 emission rate averages, determined by dividing total quarterly SO_2 emissions by total quarterly heat input values for all affected units at the facility.

(3) The owner or operator of an affected unit shall keep the records specified in subdivision (1) or (2) of this subsection at the premises for a period of five years. Such records need not be maintained for distillate oil, motor vehicle fuel, aircraft fuel, or gaseous fuel, provided such fuels have a sulfur content below 0.3% by weight (dry basis) and are the only fuels combusted at the affected unit. This exemption shall not apply when such fuels are combusted in combination with other fuels having sulfur contents above 0.3% by weight (dry basis).

(j) **Reporting requirements.**

(1) The owner or operator of an affected unit for which the commissioner has issued a final Title V permit shall, as part of any compliance certification pursuant to section 22a-174-33(q)(2) of the Regulations of Connecticut State Agencies, certify in writing to the commissioner compliance with the applicable provisions of this section. Such certification shall include actual quarterly SO_2 emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

(2) The owner or operator of an affected unit for which the commissioner has not issued a final Title V permit shall certify in writing to the commissioner that such owner or operator is in compliance with the applicable provisions of this section on or before March 1 of each year for the previous calendar year. Such certification shall include actual quarterly SO_2 emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

(k) **Duty to comply with the most stringent standards applicable to the affected units.**

(1) Notwithstanding any provision of this section to the contrary, if the owner or operator of an affected unit is subject to a more stringent emission standard or limitation imposed by order, permit or other applicable law, such owner or operator shall comply with the most stringent emission limitation or standard.

(2) Notwithstanding any provision of this section to the contrary, if the owner or operator of an affected unit is subject to additional monitoring or reporting requirements imposed by order, permit or other applicable law, such owner or operator shall comply with the additional monitoring or reporting requirements.

(Adopted effective December 28, 2000; amended April 4, 2006, February 1, 2010)

Sec. 22a-174-20. Control of organic compound emissions

(a) **Storage of ''volatile organic compounds'' and restrictions for the Reid Vapor Pressure of gasoline.**

(a) (1) Definitions. For the purpose of this section:

''Approved control system'' means, a vapor balance system or a vapor recovery system.

''Delivery vehicle'' means a tank truck, tank-equipped trailer, railroad tank car, or other ''mobile source''equipped with a storage ''tank'' used for the transportation of gasoline from ''sources'' of supply to any stationary storage ''tank.''

''Dispensing facility'' means any site where gasoline is delivered to motor vehicles other than agricultural vehicles from any stationary storage ''tank'' with a capacity of 250 gallons or more.

''Gasoline'' means any petroleum distillate having a reid vapor pressure of four pounds or greater and used as a motor vehicle fuel.

''Gasoline storage tank farm'' means a ''premise'' with any individual ''gasoline'' storage ''tank'' with a capacity equal to or greater than forty thousand (40,000) gallons.

''Reid Vapor pressure'' or ''RVP'' means the vapor pressure of a liquid in pounds per square inch absolute at one hundred (100) degrees fahrenheit as determined by American Society for Testing and Materials method D323-82 ''Standard Method for Vapor Pressure of Petroleum Products (Reid Method.''

''Throughput'' means the number of gallons delivered through all equipment at a dispensing facility or a loading facility over a specified time interval.

''Vapor balance system'' means a combination of pipes or hoses which create a closed connection between the vapor spaces of an unloading ''tank'' and receiving ''tank'' such that vapors displaced from the receiving ''tank'' are transferred to the ''tank'' being unloaded and for which the vapor space connections on the unloading tank, the receiving tank and the pipes or hoses used are equipped with fittings which are vapor tight and which will automatically and immediately close upon disconnection so as to prevent the release of vapors. The complete system as a whole and not just the individual components shall have been tested and approved by a nationally recognized testing laboratory.

''Vapor recovery system'' means a device or system of devices with attendant valves, fittings, piping, and other appurtenances incorporating a means for the incineration of vapors or the liquefaction of vapors by absorption, adsorption, condensation or other means. The complete system as a whole and not just the individual components shall have been tested and approved by a nationally recognized testing laboratory.

(a) (2) No ''person'' shall place, store or hold in any stationary ''tank'' reservoir or other container of more than 40,000 gallons (150,000 liters) capacity any ''volatile organic compound'' with a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless the ''tank,'' reservoir or other container is a pressure ''tank'' capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped, with one of the vapor loss control devices listed in subparagraphs (A) through (D) below. If the control devices specified in subparagraphs 22a-174-20 (a) (2) (A) or (a) (2) (D) are used to comply with the requirements of this subdivision, then the requirements of subdivision 22a-174-20 (a) (8) must also be met.

(A) A fixed roof and a floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and ''tank'' wall. This control equipment is not permitted if the ''volatile organic compound'' has a vapor pressure of 11.0 pounds per square inch absolute (568 mm. Hg), or greater under actual storage conditions. All ''tank'' gauging or sampling devices must be gas-tight except when ''tank'' gauging or sampling is taking place.

(B) A ''vapor recovery system'' which collects all volatile organic compound vapors and gases discharged from the tank and a vapor return or disposal system which is designed to process such vapors so as to reduce their emission to the atmosphere by at least 95 percent by weight.

(C) Other equipment or means with an efficiency equal to that required under subparagraph 22a-174-20 (a) (2) (B) for purposes of ''air pollution'' control as may be approved by the ''Commissioner'' by permit or order.

(D) On or after June 1, 1985 a floating roof, consisting of a pontoon type, double deck type roof or external floating cover, which will rest on the surface of the liquid contents and be equipped with primary and secondary closure seals to close the space between the roof edge and the tank wall. This control equipment is not permitted if the volatile organic compound has a vapor pressure of 11.0 pounds per square inch absolute (568 mm. Hg), or greater under actual storage conditions. All tank gauging or sampling devices must be gas-tight except when tank gauging or sampling is taking place. The owner or operator of any tank subject to this provision shall ensure that:

(i) Any seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;

(ii) The total area of gaps, determined in accordance with the requirements of subdivision 22a-174-20 (a) (9), exceeding 0.125 inches in width between the secondary closure seal and the tank wall does not exceed 1.0 square inch per foot of tank diameter;

(iii) A secondary closure seal gap measurement as specified in (ii) above is made annually;

(iv) A visual inspection of the secondary closure seal is conducted semi-annually;

(v) Any emergency roof drain is provided with a slotted fabric cover which covers at least ninety percent (90%) of the area opening.

(a) (3) No ''person'' shall place, store, or hold in any stationary storage vessel of more than 250-gallon (950 liter) capacity any ''volatile organic compound'' with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions unless such vessel is equipped with a permanent ''submerged fill pipe'' with a discharge point eighteen (18) inches or less from the bottom of the storage vessel or is a pressure ''tank'' as described in subdivision 22a-174-20 (a) (2).

(a) (4) The provisions of subdivision 22a-174-20 (a) (3) shall not apply to the loading of ''volatile organic compounds'' into any storage vessel having a capacity of less than one-thousand (1,000) gallons which was installed prior to June 1, 1972, nor to any underground storage vessel installed prior to June 1, 1972, where the fill pipe between the fill connection and the storage vessel is an ''offset fill pipe.''

(a) (5) Between May 1 and September 15 the owner or ''operator'' of any ''gasoline storage tank farm'' shall not offer for sale, sell or deliver to any ''dispensing facility'' in Connecticut ''gasoline'' with a ''Reid Vapor Pressure'' in excess of 9.0 pounds per square inch.

(a) (6) In addition to the requirements of section 22a-174-4, the ''Commissioner'' may by permit or order require the owner or ''operator'' of any ''gasoline storage tank farm'' to provide records of the analysis of ''gasoline'' samples to determine compliance with the provisions of subdivision 22a-174-20 (a) (5).

(a) (7) Any ''person'' who samples or tests ''gasoline'' for the purposes of determining compliance with subdivision 22a-174-20 (a) (5) shall use the following American Society for Testing and Materials (ASTM) test methods:

(A) ASTM Method D323-82, ''Standard Method for Vapor Pressure of Petroleum Products (Reid Method)'';

(B) ASTM Method D4057-81, ''Standard Practice for Manual Sampling of Petroleum and Petroleum Products''; or

(C) ASTM Method D270 ''Standard Method of Sampling of Petroleum and Petroleum Products.''

(a) (8) The owner or operator of any ''tank'' which uses the control devices specified in subparagraphs 22a-174-20 (a) (2) (A) or (a) (2) (D) shall ensure that such ''tank'' meets the requirements of subparagraphs (A) through (F) of this subdivision.

(A) There are no visible holes, tears or other openings in the seal or any seal fabric or materials.

(B) All openings except stub drains are equipped with covers, lids or seals such that:

(i) the cover, lid or seal is in the closed position at all times except in actual use; and

(ii) automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports; and

(iii) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(C) Routine inspections are conducted through roof hatches once per month.

(D) A complete inspection of cover and seal is conducted whenever the ''tank'' is emptied for nonoperational reasons but in any event at least once per year; and

(E) Records of the average monthly storage temperature, true vapor pressure, monthly throughput and type of volatile organic compounds stored are maintained and kept for a minimum of two (2) years after such record is made.

(F) Records of the results of the inspections conducted under subparagraphs (C) and (D) of this subdivision are maintained and kept for a minimum of two (2) years after such record is made.

(a) (9) Compliance with the requirements regarding the total area of gaps under subparagraph 22a-174-20 (a) (2) (D) shall be determined by physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 CM (1/8 in.) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and the tank wall and summing the area of the individual gaps. Any person who proposes to conduct this test shall notify the Department's Air Compliance Unit not less than thirty (30) days before the test so the Department may, at its option, observe the test.

(a) (10) The owner or operator of any tank with a capacity in excess of 40,000 gallons and which is equipped with an external floating roof shall maintain records of the average monthly storage temperature, the type of liquid stored and its vapor pressure, for any ''volatile organic compound'' with a vapor pressure under actual storage conditions which is greater than 1.0 pounds per square inch but less than 1.5 pounds per square inch.

(b) **Loading of gasoline and other volatile organic compounds.**

(1) Additional definitions. For the purposes of this subsection the following definition shall apply:

''Loading facility'' means any aggregation or combination of equipment located on a premises and used to load or unload any volatile organic compound with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions.

(2) No person shall load or permit the loading of any volatile organic compound with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions into any delivery vehicle from any loading facility with a throughput of 10,000 gallons or more in any one day unless such loading facility is equipped with a vapor collection and disposal system or its equivalent, properly installed, in good working order, and in operation, and

(A) the vapors discharged from the delivery vehicle during loading are processed by a vapor recovery system; and

(B) the amount of volatile organic compounds released to the ambient air is less than 80 milligrams per liter of liquid loaded over a six (6) hour period. To determine compliance with this requirement the reference methods and test procedures found in Title 40 Code of Federal Regulations Part 60.503(a) and Part 60.503(c), respectively shall be used.

(3) No person shall load or permit the loading of any volatile organic compounds with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions into any delivery vehicle having a capacity in excess of 200 gallons (760 liters) from any loading facility with a throughput of 10,000 gallons or more in any one day unless such loading facility is equipped with a loading arm with a vapor collection adaptor, pneumatic, hydraulic, or other mechanical means to force a vapor-tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid organic compounds drainage from the loading device when it is

removed from the hatch of any delivery vehicle, or to accomplish complete drainage before such removal. When loading is effected through means other than hatches, all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

(4) Subdivisions (2) and (3) of this subsection shall apply only to the loading of volatile organic compounds with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions at a facility from which at least 10,000 gallons of such organic compounds are loaded in any one day. The applicability of subdivisions (2) and (3) of this subsection shall be based upon a thirty day rolling average and once a loading facility exceeds this limit, the requirements of subdivisions (2) and (3) of this subsection shall always apply.

(5) After April 1, 1982, no person shall transfer or allow the transfer of gasoline to or from any delivery vehicle to or from any loading facility with a throughput of less than 10,000 gallons a day and more than 4,000 gallons a day unless the transfer takes place through a submerged fill pipe and a vapor balance system is used. The throughput of a loading facility shall be based upon a thirty day rolling average and once a loading facility exceeds this limit, the requirements of this subdivision shall always apply.

(6) By December 31, 1982, any person who owns or operates any dispensing facility with a stationary storage tank for gasoline having a capacity of more than two thousand (2,000) gallons and a throughput of ten thousand (10,000) gallons or more per thirty (30) day period shall install at each stationary storage tank an approved control system. The applicability of this subdivision shall be based upon a thirty day rolling average and once a loading facility exceeds this limit, the requirements of this subdivision shall always apply.

(7) After December 31, 1982, no person shall install any stationary storage tank for gasoline with a capacity of more than two hundred fifty (250) gallons and a throughput of ten thousand (10,000) gallons or more per thirty (30) day period unless the tank has an approved control system. The throughput of a loading facility shall be based upon a thirty day rolling average and once a loading facility exceeds this limit, the requirements of this subdivision shall always apply.

(8) Effective May 31, 1983, no person shall transfer or allow the transfer of gasoline from a delivery vehicle to a stationary storage tank subject to the provisions of subdivisions (6) or (7) of this subsection unless:

(A) the transfer is made through a properly maintained and operated approved control system which is in good working order, connected and operating; and

(B) there are no leaks in pressure/vacuum relief valves and hatch covers of the delivery vehicle, nor in the truck tanks, storage tank or associated vapor and liquid lines during loading or unloading.

(9) No person shall dispense gasoline to a stationary storage tank having an approved control system in such a manner as to impair the collection efficiency of the control system.

(10) The owner or operator of a delivery vehicle shall ensure that:

(A) the delivery vehicle is designed and maintained to be vapor-tight at all times;

(B) the hatches are closed at all times during loading and unloading operations;

(C) the pressure relief valves are set to release at no less than 0.7 pounds per square inch; and

(D) the vapor laden delivery vehicle is refilled only at facilities which meet the requirements of subdivisions (2) or (5) of this subsection.

(11) The Commissioner may provide an exemption to the provisions of subdivisions (5) or (6) of this subsection for economic or technological impracticability. Any exemption granted under this subdivision shall require the approval of the Administrator.

(12) Any owner or operator of a delivery vehicle that receives gasoline from a loading facility described in subdivisions (2) or (5) of this subsection or delivers gasoline to a dispensing facility subject to the provisions of subdivisions (6) or (7) of this subsection or any loading facility subject to subdivision (5) of this subsection shall not cause or permit a delivery vehicle to load or unload gasoline unless:

(A) such owner or operator tests the tank on such delivery vehicle once every twelve (12) months in accordance with Method 27 as set forth in Appendix A of Title 40 Code of Federal Regulations Part 60 or another manner accepted by the Administrator and approved by the Commissioner in accordance with section 22a-174-5;

(B) Repealed;

(C) during the test specified in subparagraph (A) of this subdivision, the tank sustains a pressure change of no more than three (3) inches of water in five (5) minutes when pressurized to a gauge pressure of eighteen (18) inches of water or when evacuated to a gauge pressure of six (6) inches of water; and

(D) the delivery vehicle displays a marking near the U.S. Department of Transportation markings required by Title 49 of the Code of Federal Regulations Section 177.824 which shows the initials ''DEP'' and the date of the last test or comparable markings as required by either the Connecticut Department of Transportation or the Connecticut Department of Motor Vehicles.

(13) The owner or operator of any delivery vehicle which fails to meet the requirements of subdivisions (12) or (14) of this subsection shall repair and retest such vehicle within fifteen (15) days.

(14) Any person who performs a test required by subdivision (12) of this subsection shall:

(A) notify the Department's Air Compliance Unit of the time and location of the test at least forty-eight (48) hours in advance; and

(B) submit a copy of the test report to the Commissioner within ten (10) days after performing a test.

(15) The owner or operator of any delivery vehicle subject to the provisions of subdivision (12) of this subsection shall ensure that:

(A) during loading and unloading operations the tank is not subject to a pressure in excess of eighteen (18) inches of water, nor a vacuum in excess of six (6) inches of water;

(B) during loading and unloading operations there are no visible liquid leaks and there is never a reading equal to or greater than the Lower Explosive Limit (LEL, measured as propane) at one (1) inch from any source of potential leaks as detected by a combustible gas detector using the test procedure described in Appendix B to ''Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems'' (EPA-450/2-78-051); and

(C) records of all tests performed under subdivision (12) of this subsection are maintained for a minimum of five (5) years.

(16) The owner or operator of any loading facility, dispensing facility or delivery vehicle subject to the provisions of this subsection shall:

(A) within six (6) months of the effective date of this subdivision, develop a written operation and maintenance (O&M) plan for any equipment used to load or unload gasoline;

(B) within twelve (12) months of the effective date of this subdivision, develop a formal training program implementing the O&M plan for any person who receives gasoline from a loading facility described in subdivisions (2) or (5) of this subsection or delivers gasoline to a dispensing facility subject to the provisions of subdivisions (6) or (7) of this subsection or any loading facility subject to subdivision (5) of this subsection;

(C) make and keep monthly records demonstrating implementation of the O&M plan, including records of persons completing the training program required by subparagraph (B) of this subdivision, at the subject facility; and

(D) maintain such records at the subject facility for a period of five (5) years, and provide such records to the commissioner upon request.

(c) **''Volatile organic compound'' water separation.** No ''person'' shall use any compartment of any single or multiple compartment ''volatile organic compound'' ''waste water separator'' which receives effluent water containing 200 gallons (760 liters) a day or more of any ''volatile organic compound'' with a vapor pressure of 1.5 pounds per square inch or more from any equipment processing, refining, treating, storing, or handling ''volatile organic compounds'' unless such compartment is equipped with one or more of the following vapor loss control devices, properly installed, in good working order, and in operation:

(1) A container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices be gas-tight except when gauging or sampling is taking place.

(2) A container equipped with a floating roof, consisting of a pontoon type, double deck type roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices shall be gastight except when gauging or sampling is taking place.

(3) A container equipped with a ''vapor recovery system'' which collects all volatile organic compound vapors discharged from the container and which processes such vapors to reduce their emissions by at least 95 per cent by weight.

(4) A container having other equipment of equal efficiency for the purpose of ''air pollution'' control as required by subdivision (3) of this subsection may be approved by the ''Commissioner'' by permit or order.

(d) **Pumps and compressors.** All pumps and compressors handling ''volatile organic compounds'' with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions shall have mechanical seals or other equipment of equal efficiency for purposes of ''air pollution'' control as may be approved by the ''Commissioner,'' except that in cases where mechanical seals are impractical because of the abrasive or corrosive nature of the liquid handled, best available technology for the reduction of ''organic compound'' ''emissions'' shall be deemed equivalent to the use of mechanical seals.

(e) **Waste gas disposal.**

(e) (1) No ''person'' shall cause or permit any ''emission'' from any ethylene producing plant or other ethylene ''emission'' ''source'' unless the waste gas stream is properly burned at 1300°F. (704°C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device as approved by the ''Commissioner.'' This provision shall not apply to emergency reliefs and vapor blowdown systems.

(e) (2) No ''person'' shall cause or permit any ''emission'' of organic gases from a vapor blowdown systems or emergency relief unless these gases are burned by smokeless ''flares'' or an equally effective control device as approved by the

''Commissioner.'' Exemption to this section will be considered when the frequency of venting and the quantity of potential release are low, and all occurrences are reported to the ''Commissioner.'' In the case of emergency reliefs, exemption will also be considered if the ''Commissioner'' determines that addition of control equipment would constitute an explosion hazard or other safety hazard.

(f) **Organic solvents.**

(f) (1) No ''person'' shall cause or permit the discharge into the atmosphere of more than 40 pounds of organic materials in any one day, nor of more than 8 pounds in any one hour, from any article, machine, equipment or other contrivance, in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured or heat-polymerized, in the presence of oxygen, unless the discharge has been reduced by at least 85 percent overall. Those portions of any series of articles, machines, equipment or other contrivances designed for processing a continuous web, strip or wire which emit organic materials and using operations described in this subsection are collectively subject to compliance with this subdivision.

(f) (2) No ''person'' shall cause or permit the discharge into the atmosphere of more than 40 pounds of organic materials in any one day, nor of more than 8 pounds in any one hour, from any article or machine, other than described in subdivision (f) (1), for employing or applying any highly photochemically reactive solvent as defined in subdivisions (i) (1) or (i) (2) of this section unless the discharge has been reduced by at least 85 percent overall. ''Emissions'' of organic materials into the atmosphere resulting from air or heated drying or products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this subdivision are included in determining compliance with this subdivision. ''Emissions'' resulting from baking, heat-curing, or heat-polymerizing as described in subdivision (f) (1) are excluded from determination of compliance with this subdivision. Those portions of any series or articles, machines, equipment or other contrivances designed for processing a continuous web, strip or wire which emit organic materials and using operations described in this subdivision shall be collectively subject to compliance with this subdivision.

(f) (3) Reserved

(f) (4) On or after June 1, 1973, no ''person'' shall cause or permit the discharge into the atmosphere of more than 800 pounds of organic materials in any one day, nor more than 160 pounds in any one hour, from any article, machine, equipment or other contrivance in which any organic solvent or any material containing such solvent is employed or applied, unless the discharge has been reduced by at least 85 percent overall. ''Emissions'' of organic materials into the atmosphere resulting from air or heated drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this subsection are included in determining compliance with this subdivision. ''Emissions'' resulting from baking, heat-curing, or heat-polymerizing as described in subsection (f) (1) are excluded from determination of compliance with this subdivision. Those portions of any series of articles, machines, equipment or other contrivances designed for processing a continuous web, strip or wire which emit organic materials and using operations described in this subsection are collectively subject to compliance with this subdivision.

(f) (5) ''Emissions'' of organic materials to the atmosphere from the cleanup of any article, machine, equipment or other contrivance described in subdivisions (f) (1) through (f) (4) inclusive are included with the other ''emissions'' of organic

materials from that article, equipment or other contrivance for determining compliance.

(f) (6) The owner or ''operator'' of a ''source'' subject to subdivision (f) (1), (f) (2) or (f) (4) shall achieve the ''emission'' limits under those paragraphs by:

(A) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide each hour. However, incineration is not acceptable for halogenated hydrocarbons;

(B) Adsorption, provided that organic emissions are reduced by 90 percent or more each hour; or

(C) A system demonstrated to have control efficiency equivalent to or greater than the above and approved by the ''Commissioner'' by permit or order.

(f) (7) A ''person'' incinerating, adsorbing, or otherwise processing organic materials pursuant to subdivision (f) (6) shall provide, properly install, and maintain in calibration, in good working order, and in operation, devices or procedures as specified by the ''Commissioner'' for indicating and recording temperatures, pressures, rates of flow, or other operating conditions necessary to determine the degree and effectiveness of ''air pollution'' control.

(f) (8) Any ''person'' using or supplying solvents or any materials containing organic solvents shall supply the ''Commissioner,'' upon request and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

(9) The provisions of subsection (f) shall not apply to:

(A) The use of equipment for which other requirements are specified by any one of the following subsections of this section: (a) through (e), (k) through (y) or (ff) through (jj); or for which reasonably available control technology is required by section 22a-174-32 of the Regulations of Connecticut State Agencies;

(B) The spraying or other employment of insecticides, pesticides, or herbicides; or

(C) The ''emission'' of ''organic compounds'' from coating operations where the ''volatile organic compound'' portion of the coating solvent is 20 per cent or less by weight.

(f) (10) For the purposes of subsection (f), organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.

(f) (11) For the purposes of subsection (f), organic solvents include diluents and thinners and are defined as organic materials which are liquids at ''standard conditions'' and which are used as dissolvers, viscosity reducers or cleaning agents, except that such materials which exhibit a boiling point higher than 220°F under standard conditions or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 220°F.

(f) (12) For the purpose of subdivisions (f) (1) and (f) (4), 85 percent reduction of organic materials ''emissions'' shall mean 85 percent reduction of total organic materials ''emissions'' present when operations are conducted according to good industrial practice.

(f) (13) For the purpose of subdivision (f) (2) 85 percent reduction of ''emissions'' shall mean 85 percent reduction of highly photochemically reactive solvent ''emissions'' present when operations are conducted according to good industrial practice, utilizing the maximum proportion of highly photochemically reactive solvent appropriate to such good practice. Substitution of a nonhighly photochemically reactive solvent shall be considered 100 percent reduction of the highly photochemically reactive ''emissions'' involved.

(f) (14) For the purposes of subsection (f), a continuous web, strip or wire means a product which contains at least one unbroken web, strip or wire from beginning to end of an article, machine, equipment or other contrivance (or series of) irrespective of the addition of any other materials during processing.

(g) **Reserved.**

(h) **Exemptions.** If the ''Commissioner'' determines that nonhighly photochemically unreactive solvents are not available for a particular application or class of applications, then the Commissioner may issue an order providing for an exemption, provided that this shall not prevent the ''attainment'' or maintenance of the national ''ambient air quality standard'' for photochemical oxidants.

(i) **Classification of solvents.**

(i) (1) The following solvents shall be considered highly photochemically reactive:

(A) Group R1: Any hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones, having an olefinic or cycloolefinic type of unsaturation.

(B) Group R2: Any aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene, phenyl acetate, and methyl benzoate.

(C) Group R3: Any ketones having branched hydrocarbon structures, and ethylbenzene, trichloroethylene, and toluene.

(i) (2) Any solvent mixture will be considered highly photochemically reactive if the composition of the mixture exceeds any of the following limits by volume:

(A) 5 percent of any combination of chemical compounds in group R1.

(B) 8 percent of any combination of chemical compounds in group R2.

(C) 20 percent of any combination of chemical compounds in group R3.

(D) 20 percent of any combination of chemical compounds in groups R1, R2, and R3.

(i) (3) Whenever any organic solvent or any constituent of any organic solvent may be classified from its chemical structure into more than one of the above groups of ''organic compounds,'' it shall be considered a member of the most reactive chemical group, which is, that group having the least allowable percent of the total volume of solvents.

(i) (4) Any solvent not classified in subdivision (i) (1) and any solvent mixture which does not exceed any of the limits in subdivision (i) (2) of this section shall be considered nonhighly photochemically reactive.

(j) **Disposal and evaporation of solvents.** A ''person'' shall not, during any one day, dispose of more than one and one-half gallons (5.7 liters) of any volatile organic compound or of any material containing more than one and one-half gallons (5.7 liters) of any volatile organic compound by any means which will permit the evaporation of such solvent into the atmosphere.

(k) **Restrictions on VOC emissions from cutback and emulsified asphalt.**

(1) Definitions. For the purposes of this subsection:

(A) ''Asphalt'' means a dark brown or black solid, liquid or semisolid cementitious material composed primarily of bitumens that occur in nature or are obtained as residue in refining petroleum.

(B) ''Cutback asphalt'' means asphalt that has been liquefied by blending with a diluent of petroleum solvents or any other diluent that contains VOC.

(C) ''Emulsified asphalt'' means an emulsion of asphalt and water that contains a small amount of an emulsifying agent; it is a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms

the continuous phase of the emulsion, and minute globules of asphalt form the discontinuous phase.

(2) Applicability.

This subsection shall apply to any person who, on or after May 1, 2009, stores, uses, solicits the use of, or applies asphalt for road paving, road maintenance or road repair.

(3) Standards.

(A) Except with prior written approval of the Commissioner and the Administrator as provided in subdivision (4) of this subsection, during the period from May 1 through September 30 of any calendar year, no person shall use or apply:

(i) Cutback asphalt; or

(ii) Emulsified asphalt, unless:

(I) The asphalt, as applied, was formulated to contain not greater than 0.1% VOC by weight, or

(II) The asphalt, as applied, produces not greater than 6.0 milliliter of oil distillate by distillation as tested by ASTM Method D 244 or AASHTO Method T 59.

(B) Any person who stores asphalt during the period of time from October 1 through April 30, may continue to store such asphalt during May 1 through September 30.

(4) Exceptions.

(A) The use or application of cutback asphalt or emulsified asphalt that does not comply with subdivision (3) of this subsection may be allowed upon obtaining approval from the Commissioner and the Administrator.

(B) Any request for an approval under this subdivision shall be made in writing to the Commissioner and the Administrator and shall include, at a minimum, the following information:

(i) The scope of the activity,

(ii) An assessment of alternative materials and procedures,

(iii) Quantification of the amount of VOC that would be emitted as a result of such activity,

(iv) The dates during which the activity will occur, and

(v) A demonstration that it is necessary for the activity to occur during the period commencing on May 1 and ending after September 30.

(5) Recordkeeping.

(A) Any person subject to this subsection shall:

(i) Maintain records of test, formulation, and usage data, and any other information necessary for the Commissioner to determine compliance with the requirements of this subsection,

(ii) Maintain all records required pursuant to this subsection in a readily accessible location in Connecticut for a minimum of five (5) years, and

(iii) Provide records made pursuant to this subsection to the Commissioner not later than thirty (30) days after a request to provide such records.

(B) Any person who has obtained approval for a non-complying use pursuant to subdivision (4) of this subsection shall maintain copies of the request, all supporting materials and the written approval of the Commissioner.

(*l*) **Metal cleaning.**

(*l*)(1) Definitions. For the purposes of this subsection:

(A) ''Air knife system'' means ''air knife system'' as defined in 40 CFR 63.461.

(B) ''Cold cleaning'' means the batch process that involves spraying, brushing, flushing or immersion to clean and remove soils from metal surfaces using a

degreasing solvent maintained at a temperature less than the boiling point of the solvent. Neither wipe cleaning nor spray application equipment cleaning is included in this definition.

(C) ''Continuous web cleaning machine'' means ''continuous web cleaning machine'' as defined in 40 CFR 63.461.

(D) ''Conveyorized degreasing'' means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized degreasing solvents.

(E) ''Degreasing solvent'' means any volatile organic compound used for metal cleaning.

(F) ''Freeboard height'' means, for a cold cleaner, the distance from the liquid solvent in the degreaser tank to the lip of the tank. For an open top vapor degreaser it is the distance from the solvent vapor level in the tank during idling to the lip of the tank. For a vapor conveyorized degreaser, it is the distance from the vapor level to the bottom of the entrance or exit opening whichever is lower. For a cold conveyorized degreaser, it is the distance from the liquid solvent level to the bottom of the entrance or exit opening whichever is lower.

(G) ''Freeboard ratio'' means the freeboard height divided by the smaller interior dimension (length, width or diameter) of the degreaser.

(H) ''Open top vapor degreasing'' means the batch process of cleaning and removing soils from metal surfaces by condensing hot degreasing solvent vapor on the colder metal parts.

(I) ''Metal cleaning'' means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

(J) ''Refrigerated chiller'' means a device, mounted above the water jacket and the primary condenser coils, that consists of secondary coils which carry a refrigerant to provide a chilled air blanket above the solvent vapor to reduce emissions from the degreaser bath. The chilled air blanket temperature, measured at the centroid of the degreaser at the coldest point, shall be no greater than 30% of the solvent's boiling point in degrees Fahrenheit.

(K) ''Special and extreme solvent metal cleaning'' means the use of a cold cleaning unit to clean metal parts where such metal parts are used:

(i) In the research, development, manufacture and rework of electronic parts, assemblies, boxes, wiring harnesses, sensors and connectors used in aerospace service,

(ii) In manufacturing ozone, nitrous oxide, fluorine, chlorine, bromine, halogenated compounds or oxygen in concentrations greater than 23%,

(iii) In the research, development, manufacture and rework of high precision products for which contamination must be minimized in accordance with a customer or other specification, or

(iv) In a manner that exposes such metal parts to ozone, nitrous oxide, fluorine, chlorine, bromine, halogenated compounds or oxygen in concentrations greater than 23%.

(L) ''Squeegee system'' means ''squeegee system'' as defined in 40 CFR 63.461.

(*l*)(2) The provisions of this subsection apply with the following exceptions:

(A) Open top vapor degreasers with an open area smaller than one square meter (10.8 square feet) are exempt from the provisions of clauses (ii), (iv) and (v) of subparagraph (C) of subdivision (4) of subsection (*l*) of this section;

(B) Conveyorized degreasers with a solvent/air interface smaller than two square meters (21.6 square feet) are exempt from the provisions of subparagraph (C) of subdivision (5) of subsection (*l*) of this section; and

(C) Metal cleaning equipment which uses 1,1,1 trichloroethane, methylene-chloride, or trichlorotrifluoroethane.

(*l*) (3) Except as provided in subdivisions (*l*)(6), (*l*)(7) or (*l*)(8) of this section, the owner or operator of any cold cleaning unit with an internal volume greater than one (1) liter and using solvents containing greater than five percent (5%) VOCs by weight shall meet the requirements of this subdivision.

(A) Equip the cleaning device with a cover that is easily operated with one hand.

(B) Equip the cleaning device with an internal rack or equipment for draining cleaned parts so that parts are enclosed under the cover while draining. Such drainage rack or equipment may be external for applications where an internal type cannot fit into the cleaning system.

(C) Collect and store waste solvent in closed containers. Closed containers used for storing waste solvent may contain a device that allows pressure relief but does not allow liquid solvent to drain from the container.

(D) Close the cover if parts are not being handled in the cleaner for two (2) minutes or more, or if the device is not in use.

(E) Drain the cleaned parts for at least 15 seconds or until dripping ceases, whichever is longer.

(F) If a degreasing solvent spray is used:

(i) Supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray),

(ii) maintain a solvent spray pressure that does not exceed ten (10) pounds per square inch as measured at the pump outlet, and

(iii) perform spraying within the confines of the cold cleaning unit.

(G) Minimize the drafts across the top of each cold cleaning unit such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between one and two meters upwind, at the same elevation as the tank lip.

(H) Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired. Any leaked solvent or solvent spilled during transfer shall be cleaned immediately, and the wipe rags or other sorbent material used to clean the spilled or leaked solvent shall be immediately stored in covered containers for disposal or recycling.

(I) Provide a permanent, conspicuous label on or posted near each unit summarizing the applicable operating requirements.

(J) Maintain records of the information identified in this subparagraph for a minimum of five (5) years after such record is made:

(i) The type of solvent used, including a description of the solvent and the solvent name,

(ii) The vapor pressure of the solvent in mmHg measured at 20 degrees Celsius (68 degrees Fahrenheit),

(iii) The percent VOC content by weight, and

(iv) The amount of solvent added to each unit on a monthly basis.

(K) On or after May 1, 2008, use only solvent that has a vapor pressure less than or equal to 1.0 mmHg at 20 degrees Celsius.

(L) Shall not clean sponges, fabric, wood, leather, paper and other absorbent material in a cold cleaning machine.

(*l*) (4) The owner or operator of any open top vapor degreaser shall meet the requirements of this subdivision.

(A) Equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.

(B) Provide the following safety switches:

(i) A condenser flow switch and device which shuts off the sump heat if the condenser coolant is not circulating or if the vapor level rises above the height of the primary condenser; and

(ii) A spray safety switch which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches) below the lowest condensing coil.

(C) Install one of the following control devices:

(i) Powered cover, if the freeboard ratio is greater than or equal to 0.75, and if the degreaser opening is greater than 1 square meter (10 square feet);

(ii) Refrigerated chiller;

(iii) Enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser);

(iv) Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of solvent/vapor area (when cover is open), and exhausting less than 25 parts per million of degreasing solvent averaged each complete adsorption cycle; or

(v) A control system, demonstrated to have control efficiency equivalent to or greater than that required of the carbon adsorption system required in this subparagraph which is approved by the commissioner by permit or order.

(D) Keep the cover closed at all times except when processing work loads through the degreaser.

(E) Store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere.

(F) Minimize solvent carryout by:

(i) Racking parts to allow complete drainage;

(ii) moving parts in and out of the degreasing unit at less than 3.3 meters per minute (11 feet per minute);

(iii) holding the parts in the vapor zone at least thirty (30) seconds or until condensation ceases, whichever is longer;

(iv) tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

(v) allowing parts to dry within the degreasing unit for at least fifteen seconds or until visually dry, whichever is longer.

(G) Do not degrease porous or absorbent materials, such as cloth, leather, wood or rope.

(H) Do not occupy more than half of the degreaser unit's open top area with a workload.

(I) Do not load the degreasing unit to the point where the vapor level would drop more than ten (10) centimeters (4 inches) when the workload is removed from the vapor zone.

(J) Always spray within the vapor level.

(K) Operate the degreasing unit so as to prevent water from being visually detectible in solvent exiting the water separator.

(L) Do not expose the degreasing unit to drafts greater than forty (40) meters per minute (131 feet per minute) as measured between 1 and 2 meters upwind and at the same elevation as the tank lip, nor provide exhaust ventilation exceeding twenty

(20) cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreasing unit open area, unless necessary to meet OSHA requirements;

(M) Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired;

(N) Provide a permanent, conspicuous label on or posted near each unit summarizing the applicable operating requirements;

(O) Maintain a monthly record of the amount of solvent added to each unit and keep such record for a minimum of two (2) years after such record is made; and

(P) If the open top vapor degreaser is equipped with a lip exhaust, the cover required in subparagraph (A) of this subdivision shall be located below the lip exhaust.

(*l*)(5) The owner or operator of any conveyorized degreaser shall meet the requirements of this subdivision.

(A) Install one of the following control devices:

(i) Refrigerated chiller;

(ii) Carbon adsorption system, with ventilation greater than or equal to fifteen (15) cubic meters per minute per square meter (50 cubic feet per minute per square foot) of solvent/air area (when downtime covers are open), and exhausting less than twenty five (25) parts per million of degreasing solvent by volume averaged over each complete adsorption cycle; or

(iii) A system, demonstrated to have a control efficiency equivalent to or greater than that required of the carbon adsorption system required in this subparagraph, which is approved by the commissioner by permit or order.

(B) Provide the following safety switches:

(i) A condenser flow switch and device that shuts off the sump heat if the condenser coolant is not circulating or if the vapor level rises above the height of the primary coil; and

(ii) A spray safety switch that shuts off the spray pump or the conveyor if the vapor level drops more than ten (10) centimeters (4 inches) below the lowest condensing coil.

(C) Store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, such that greater than twenty (20) percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere.

(D) Rack parts to allow complete drainage.

(E) Maintain conveyor speed at less than eleven (11) feet per minute, except that the owner or operator of any continuous web cleaning machine equipped with a squeegee system, air knife system or similar system to remove solvent film from the surfaces of a continuous web part, operated and maintained such that no visible solvent film remains on the continuous web part immediately after it exits the cleaning machine, shall be exempt from the conveyor speed requirement of this subparagraph.

(F) Use either a drying tunnel, rotating basket, or other equivalent method to prevent cleaned parts from carrying out solvent liquid.

(G) Place covers over entrances and exits immediately after conveyors and exhausts are shutdown, leaving them in place until just prior to start-up.

(H) Minimize openings during operation so that entrances and exits will silhouette workloads with an average clearance between the parts and the edge of the degreasing unit opening of less than ten (10) centimeters (4 inches) or less than ten (10) percent of the width of the opening.

(I) Prevent water from being visually detectible in solvent exiting the water separator.

(J) Do not provide exhaust ventilation exceeding twenty (20) cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreasing unit open area, unless necessary to meet OSHA requirements.

(K) Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired.

(L) Provide a permanent, conspicuous label on or posted near each unit summarizing the applicable operating requirements.

(M) Maintain a monthly record of the amount of solvent added to each unit and keep such record for five (5) years after such record is made.

(*l*)(6) The commissioner may deem a cold cleaning unit in compliance with the requirements of subparagraphs (A), (B), and (D) of subsection (*l*)(3) of this section, notwithstanding that such unit is uncovered, if the owner or operator submits written documentation to the commissioner's satisfaction demonstrating such unit provides equal or better control of volatile organic compound emissions than a similar cold cleaning unit meeting such requirements. The written documentation shall include information demonstrating compliance with the following criteria:

(A) The cold cleaner shall have a remote solvent reservoir;

(B) On or prior to April 30, 2008, the solvent used in the cold cleaner must not have a vapor pressure that exceeds 4.3kPa (33mm Hg or 0.6 PSI) measured at 38° C (100°F) or be heated above 50°C (120°F);

(C) The sink-like work area shall have an open drain area less than 100 cm^2; and

(D) The waste solvent shall be stored or properly disposed of with minimal loss due to evaporation.

(7) Subsections (*l*)(3)(F) and (*l*)(3)(G) of this section shall not apply to the owner or operator of any cold cleaning unit used for special and extreme solvent metal cleaning if the owner or operator complies with the following requirements:

(A) Limits the amount of solvent consumed in special and extreme solvent metal cleaning spray operations at the premises, excluding solvent capture and recycled, to less than 3,000 gallons in any 12-month period;

(B) Uses a solvent with a VOC content less than 7.7 pounds per gallon; and

(C) In addition to the records required pursuant to subsection (*l*)(3)(J) of this section, makes and maintains records sufficient to demonstrate compliance with subparagraphs (A) and (B) of this subdivision.

(8) Subsection (*l*)(3)(K) of this section shall not apply to the owner or operator of any of the following cold cleaning units:

(A) Used for special and extreme solvent metal cleaning;

(B) For which the owner or operator has submitted a demonstration that compliance with subsection (*l*)(3)(K) of this section will result in unsafe operating conditions and received approval from the commissioner; or

(C) Located in a permanent total enclosure equipped with control equipment that is designed and operated with an overall VOC removal efficiency of 90 percent or greater.

(9) On and after May 1, 2008, any person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide to the purchaser the following information:

(A) The type of solvent including a description of the solvent and the solvent name,

(B) The vapor pressure of the solvent measured in mmHg at 20 degrees Celsius (68 degrees Fahrenheit); and

(C) The percent VOC content by weight.

(m) **Can coating.**

(1) For the purpose of this subsection:

''End sealing compound'' means a synthetic rubber compound that is applied on to can ends and that functions as a gasket when the end is assembled on the can.

''Exterior base coating'' means a coating applied to the exterior of a can to provide exterior protection to the metal and to provide background for the lithographic or printing operation.

''Interior base coating'' means a coating applied by roller coater or spray to the metal sheets for three-piece cans to provide a protective lining between the can metal and product.

''Interior body spray'' means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

''Overvarnish'' means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss or to protect the finish against abrasion and corrosion.

''Three-piece can side-seam spray'' means a coating sprayed on the exterior and interior of a welded, cemented or soldered seam to protect the exposed metal.

''Two-piece can exterior end coating'' means a coating applied by roller coating or spraying to the exterior end of a can to provide protection to the metal.

(2) The owner or operator of a can coating facility shall not cause or permit the discharge into the atmosphere of any volatile organic compounds from any coating in excess of;

(A) 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations.

(B) 0.51 kilograms per liter of coating (4.2 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from two- and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations.

(C) 0.66 kilograms per liter of coating (5.5 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from three-piece can side-seam spray operations.

(D) 0.44 kilograms per liter of coating (3.7 pounds per gallon), excluding water and exempt organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from end sealing compound operations.

(3) The provisions of this subsection apply to any premises that has actual emissions of fifteen (15) pounds per day or more in any one day from can coating operations. After October 1, 1989 any premises that is or becomes subject to the provisions of this subsection shall remain subject to the provisions of this subsection regardless of the daily actual emissions. Notwithstanding the above, the owner or operator of any piece of equipment that was not required to meet control requirements by this subsection prior to October 1, 1989, shall have until October 1, 1990, to comply with the control requirements of this subsection for that piece of equipment.

(n) **Coil coating.**

(1) For the purpose of this subsection:

''Coil coating'' means the coating of any flat metal sheet or strip that comes in rolls or coils.

(2) The owner or operator of a coil coating facility shall not cause or permit the discharge into the atmosphere of any volatile organic compounds from any coating in excess of 0.31 kilograms per liter of coating (2.6 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from prime and topcoat or single coat operations.

(3) The provisions of this subsection apply to any premises that has actual emissions of fifteen (15) pounds per day or more in any one day from coil coating operations. After October 1, 1989 any premises that is or becomes subject to the provisions of this subsection shall remain subject to the provisions of this subsection regardless of the daily actual emissions, notwithstanding the above, the owner or operator of any piece of equipment that was not required to meet control requirements by this subsection prior to October 1, 1989, shall have until October 1, 1990, to comply with the control requirements of this subsection for that piece of equipment.

(o) **Fabric and vinyl coating.**

(1) For the purpose of this section:

''Fabric coating'' means the coating of a textile substrate with a knife, roll or rotogravure coater to impart properties that are not initially present, such as strength, stability, water or acid repellency, or appearance.

''Knife coating'' means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate.

''Roll coating'' means the application of a coating material to a substrate by means of hard rubber or steel rolls.

''Rotogravure coating'' means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

''Vinyl coating'' means applying a decorative, functional or protective coating or printing on vinyl coated fabric or vinyl sheets.

(2) The owner or operator of a fabric coating line or a vinyl coating line shall not cause or permit the discharge into the atmosphere of any volatile organic compounds from any coating in excess of:

(A) 0.35 kilograms per liter of coating (2.9 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from a fabric coating line; and

(B) 0.45 kilograms per liter of coating (3.8 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from a vinyl coating line.

(3) The provisions of this subsection apply to any premises that has actual emissions of fifteen (15) pounds per day or more in any one day from fabric or vinyl coating operations. After October 1, 1989 any premises that is or becomes subject to the provisions of this subsection shall remain subject to the provisions of this subsection regardless of the daily actual emissions. Notwithstanding the above, the owner or operator of any piece of equipment that was not required to meet control requirements by this subsection prior to October 1, 1989, shall have until October 1, 1990, to comply with the control requirements of this subsection for that piece of equipment.

(p) **Metal furniture coating.**

(1) Definitions. For the purpose of this subsection:

(A) ''Air-dried'' means cured at a temperature below 90°C (194°F);

(B) ''As-applied'' means the composition of coating at the time it is applied to a substrate, including any solvent, catalyst or other substance added to the coating as supplied by the manufacturer;

(C) ''Baked'' means cured at a temperature at or above 90°C (194°F);

(D) ''Capture efficiency'' means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from metal furniture coating and related cleaning, expressed as a percentage;

(E) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(F) ''Coating'' means a material that is applied to a surface and that forms a continuous film in order to beautify or protect such surface;

(G) ''Coating unit'' means a series of one or more coating applicators and any associated drying area or oven wherein a coating is applied, dried or cured, including any drying area or oven where a coating is applied, dried or cured prior to any subsequent application of a different coating. A ''coating unit'' does not include any point other than the point where the coating is dried or cured;

(H) ''Dip coating'' means a method of applying a coating to a surface by submersion into and removal from a coating bath;

(I) ''Electric-insulating and thermal-conducting coating'' means a coating that displays an electrical insulation of at least 1000 volts DC per mil on a flat test plate and an average thermal conductivity of at least 0.27 BTU per hour-foot-degree-Fahrenheit;

(J) ''Electrostatic application'' means a method of applying coating particles or coating droplets to a grounded surface by electrically charging such particles or droplets;

(K) ''Extreme high gloss coating'' means a coating that, when tested by the most recent active version of the American Society for Testing Material Test Method D523, shows a reflectance of 75 or more on a 60 degree meter;

(L) ''Extreme performance coating'' means a coating used on a metal surface where the coated surface is, in its intended use, subject to one of the following conditions:

(i) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution,

(ii) Repeated exposure to temperatures in excess of 121.1°C (250°F), or

(iii) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleaners or scouring agents;

(M) ''Flow coating'' means a non-atomized technique of applying coating to a substrate using a fluid nozzle in a fan pattern with no air supplied to the nozzle;

(N) ''Heat-resistant coating'' means a coating that is required to withstand a temperature of at least 204.5dg C (400°F) during normal use;

(O) ''HVLP spray application'' means to apply a coating using a high-volume, low-pressure spray application system that is designed to operate at air pressures between 0.1 and 10 pounds per square inch gauge, measured dynamically at the center of the air cap and the air horns;

(P) ''Metal furniture coating'' means the application of a surface coating to any furniture made of metal or any metal part that will be assembled with other metal, wood, fabric, plastic or glass parts to form a furniture piece;

(Q) ''Metallic coating'' means a coating that contains more than five grams of metal particle per liter of coating, as-applied;

(R) ''Multi-component coating'' means a coating requiring the addition of a separate reactive resin, such as a catalyst or hardener, before application to form an acceptable dry film;

(S) ''One-component coating'' means a coating that is ready for application as packaged for sale, except for the addition of a thinner to reduce the viscosity;

(T) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency;

(U) ''Pretreatment coating'' means a coating, containing no more than 12% solids by weight and at least one-half percent acid by weight, applied directly to metal surfaces to provide surface etching, adhesion and ease when stripping;

(V) ''Repair coating'' means a coating used to recoat portions of a product that has sustained mechanical damage to the coating following normal painting operations;

(W) ''Roll coating'' means a coating method using a machine that applies coating to a substrate by continuously transferring coating through a set of oppositely rotating rollers;

(X) ''Safety-indicating coating'' means a coating that changes in a physical characteristic, such as color, to indicate unsafe conditions;

(Y) ''Solar-absorbent coating'' means a coating that has as its prime purpose the absorption of solar radiation;

(Z) ''Solid-film lubricant'' means a very thin coating consisting of a binder system containing as its chief pigment material one or more of molybdenum disulfide, graphite, polytetrafluoroethylene or other solids that act as a dry lubricant between faying surfaces; and

(AA) ''Stencil coating'' means an ink or a coating that is rolled or brushed onto a template or stamp to add identifying letters or numbers to metal parts or products.

(2) Applicability.

(A) The provisions of this subsection apply to:

(i) An owner or operator of any premises that has actual emissions of VOC of at least pounds per day from metal furniture coating and related cleaning, prior to the use of controls, or

(ii) An owner or operator that became subject to this subsection on and after October 1, 1989.

(B) Any owner or operator conducting metal furniture coating shall:

(i) Comply with the requirements of this subsection no later than January 1, 2011, and

(ii) Remain subject to this subsection regardless of actual daily VOC emissions.

(3) Exemptions and exceptions.

(A) The requirements of this subsection shall not apply to the following coatings or lubricant:

(i) Stencil coating,

(ii) Safety-indicating coating,

(iii) Solid-film lubricant,

(iv) Electric-insulating and thermal-conducting coating,

(v) Repair coating, or

(vi) Coating applied with a hand-held aerosol can.

(B) An owner or operator of a metal furniture coating unit operating in accordance with subdivision (5) of this subsection is exempt from any obligation to comply with subsection (bb) of this section.

(C) The requirements of subdivision (4) of this subsection shall not apply to a person using air pollution control equipment to comply with subdivision (5) of this subsection.

(D) An owner or operator of a metal furniture coating unit operating under a valid order issued pursuant to subsection (cc)(2) of this section or a valid permit issued pursuant to subsection (cc)(3) of this section shall operate as required in such order or permit, regardless of the requirements of this subsection.

(4) Application methods. A person shall not apply a VOC-containing coating to any metal furniture or metal furniture part unless the coating is applied by one of the following methods using equipment operated in accordance with the specifications of the equipment manufacturer:

(A) Electrostatic application;

(B) Flow coating;

(C) Dip coating;

(D) Roll coating;

(E) HVLP spray application;

(F) Hand application; or

(G) Any other coating application method capable of achieving a transfer efficiency equivalent to or better than that provided by HVLP spray application.

(5) Compliance options. Except as provided in subdivision (3) of this subsection, no owner or operator of a metal furniture coating unit shall apply any coating, inclusive of any VOC-containing materials added to the original coating supplied by the manufacturer, unless the owner or operator uses one of the following methods to limit emissions of VOCs:

(A) Use only coatings with an as-applied VOC content no greater than the level specified in Table 20(p)-1, according to coating category and drying method. The VOC content limits of Table 20(p)-1 apply to the volume of coating as-applied, less water and less exempt VOC;

(B) Install, operate and maintain according to the manufacturer's recommendations air pollution control equipment that reduces uncontrolled VOC emissions to the atmosphere from a coating unit by an overall control efficiency of at least 90%; or

(C) An alternative emission reduction plan that achieves a level of control equivalent to the levels described in subparagraph (A) or (B) of this subdivision and that is requested from and approved by the commissioner in accordance with subsection (cc) of this section.

(6) Work practices. Each owner or operator shall use the following work practices:

(A) New and used VOC-containing coating or cleaning solvent, including a coating mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of VOC-containing coating or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating or cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper, which are moistened with VOC-containing coatings or cleaning solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and

(D) VOC-containing coating or cleaning solvent shall be conveyed from one location to another in a closed container or pipe.

Table 20(p)-1. As-Applied VOC Content Limits Per Volume of Coating (Excluding Water and Exempt VOC) per Coating Category, Specific to the Drying Process

Coating Category	Baked		Air Dried	
	g/L	lb/gal	g/L	lb/gal
General, one component	275	2.3	275	2.3
General, multi-component	275	2.3	340	2.8
Extreme high gloss	360	3.0	340	2.8
Extreme performance	360	3.0	420	3.5
Heat-resistant	360	3.0	420	3.5
Metallic	420	3.5	420	3.5
Pretreatment	420	3.5	420	3.5
Solar-absorbent	360	3.0	420	3.5

(7) Records. An owner or operator shall maintain records of the information necessary for the commissioner to determine compliance with the applicable requirements of this subsection. All records shall be:

(A) Made available to the commissioner to inspect and copy upon request;

(B) Maintained for five years from the date such record is created; and

(C) Maintained in compliance with subsection (aa)(1) through (9) of this section.

(q) **Paper, film and foil coating.**

(1) Definitions. For the purpose of this subsection:

(A) ''As-applied'' means the composition of coating at the time it is applied to a substrate, including any solvent, catalyst or other substance added to the coating as supplied by the manufacturer;

(B) ''Capture efficiency'' means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from paper, film and foil coating and related cleaning, expressed as a percentage;

(C) ''Coating'' means a material applied onto or impregnated into a substrate for decorative, protective, or functional purposes. ''Coating'' does not include any material used to form an unsupported substrate, such as vinyl sheeting, blown film, cast film or extruded film.

(D) ''Coating line'' means a series of coating applicators, flash-off areas, and any associated curing or drying equipment between one or more unwind or feed stations and one or more rewind or cutting stations;

(E) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(F) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency;

(G) ''Paper, film and foil coating'' means the application of a continuous layer of coating across the width or any portion of the width of a paper, film or foil substrate to: (i) Create a functional or protective layer; (ii) saturate a substrate for lamination; or (iii) provide adhesion between two substrates for lamination;

(H) ''Pressure sensitive adhesive'' means adhesive that forms a bond when pressure is applied, without activation via solvent, water or heat; and

(I) ''Pressure sensitive tape and label coating'' means the application of a pressure sensitive adhesive to a paper, film or foil substrate.

(2) Applicability.

(A) The provisions of this subsection apply to:

(i) An owner or operator of any premises that has actual emissions of VOC of at least 15 pounds (6.8 kilograms) per day from paper, film and foil coating and related cleaning, prior to the use of controls, or

(ii) An owner or operator conducting paper, film and foil coating that became subject to this subsection on and after October 1, 1989.

(B) Any owner or operator conducting paper, film and foil coating shall:

(i) Comply with the requirements of this subsection no later than January 1, 2011, and

(ii) Remain subject to this subsection regardless of actual daily VOC emissions.

(3) Exemptions and exceptions.

(A) The provisions of this subsection shall not apply to the following activities:

(i) Coating performed on any coating line that has both paper coating and printing stations and that is conducted pursuant to subsection (v) of this section,

(ii) The application of sizing or water-based clays in association with the use of a papermaking machine, or

(iii) The application of inks, coatings or adhesives in association with flexible package printing conducted pursuant to subsection (ff) of this section or offset lithographic or letterpress printing conducted pursuant to subsection (gg) of this section.

(B) An owner or operator of any paper, film and foil coating line operating in compliance with subdivisions (4) and (5) of this subsection is exempt from any obligation to comply with subsection (bb) of this section.

(C) An owner or operator of a paper, film and foil coating line operating under a valid order issued pursuant to subsection (cc)(2) of this section or a valid permit issued pursuant to subsection (cc)(3) of this section shall operate as required in such order or permit, regardless of the requirements of this subsection.

(4) Except as provided in subdivision (3) or (5) of this subsection, only coatings with an as-applied VOC content less than or equal to 350 grams per liter of coating, excluding the volume of any water and exempt compounds, shall be used for paper, film and foil coating.

(5) Additional requirements. The owner and operator of any paper, film and foil coating line with a potential to emit greater than 25 tons of VOCs per year, prior to the use of controls, shall use one of the following methods to control emissions of VOCs:

(A) Use only coatings that individually meet the applicable VOC emission limit of clauses (i) or (ii) of this subparagraph, as applicable, or use only coatings so that the daily weighted average of the VOC content of all coatings used on a single coating line meets the VOC emission limit of clause (i) of this subparagraph:

(i) For all coatings except pressure sensitive tape and label coatings, use only coatings that result in VOC emissions no greater than 0.35 kilograms of VOC per kilogram of coating solids applied, or

(ii) For pressure sensitive tape and label coatings, use only coatings that result in VOC emissions no greater than 0.20 kilograms of VOC per kilogram of coating solids applied;

(B) Install, operate and maintain according to the manufacturer's recommendations air pollution control equipment that reduces uncontrolled VOC emissions to the atmosphere from a coating line by an overall control efficiency of at least 90%; or

(C) An alternative emission reduction plan that achieves a level of control equivalent to the level described in subparagraph (A) of this subdivision and that is requested from and approved by the commissioner in accordance with subsection (cc) of this section.

(6) Work practices. Each owner or operator shall use the following work practices:

(A) New and used VOC-containing coating or cleaning solvent, including a coating mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of VOC-containing coating or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating or cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper, which are moistened with VOC-containing coating or cleaning solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and

(D) VOC-containing coating or cleaning solvent shall be conveyed from one location to another in a closed container or pipe.

(7) Records. An owner or operator shall maintain records of the information necessary for the commissioner to determine compliance with the applicable requirements of this subsection. All records shall be:

(A) Made available to the commissioner to inspect and copy upon request;

(B) Maintained for five years from the date such record is created; and

(C) Maintained in compliance with subsection (aa)(1) through (9) of this section.

(r) **Wire coating.**

(1) For the purpose of this section:

''Wire coating'' means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(2) The owner or operator of a wire coating oven shall not cause or permit the discharge into the atmosphere of any volatile organic compounds from any coating in excess of 0.20 kilograms per liter of coating (1.7 pounds per gallon), excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to the coating applicator from wire coating operations.

(3) The provisions of this subsection apply to any premises that has actual emissions of fifteen (15) pounds per day or more in any one day from wire coating operations. After October 1, 1989 any premises that is or becomes subject to the provisions of this subsection shall remain subject to the provisions of this subsection regardless of the daily actual emissions. Notwithstanding the above, the owner or operator of any piece of equipment that was not required to meet control requirements by this subsection prior to October 1, 1989, shall have until October 1, 1990, to comply with the control requirements of this subsection for that piece of equipment.

(s) **Miscellaneous metal parts and products.**

(1) For the purpose of this subsection:

''Air dried coating'' means a coating that is dried by the use of air or forced warm air at temperatures up to 90 degrees C (194 degrees F).

''Clear coat'' means a base or top coating which either lacks color and opacity or which is transparent and uses the surface to which it is applied as a reflectant base or undertone color.

''Coating application system'' means all operations and equipment that apply, convey and dry a surface coating, including, but not limited to, spray booths, flow coaters, flashoff areas, air dryers and ovens.

''Exposure to extreme environmental conditions'' means exposure to: the weather all of the time; temperatures consistently above 95 degrees C; detergents; abrasive and scouring agents; solvents; corrosive atmospheres; or similar environmental conditions as determined by the commissioner and the Administrator.

''Extreme performance coatings'' means coatings designed for exposure to extreme environmental conditions.

''Heat sensitive material'' means materials that cannot consistently be exposed to temperature greater than 95 degrees C (203 degrees F) for more than 30 seconds.

''High performance architectural aluminum coating'' means a coating that is applied to architectural aluminum panels, extrusions or subsections to meet the specifications of publication number AAMA 605.2-1992 of the Architectural Aluminum Manufacturer's Association.

''Prime coat'' means the first of two or more films of coating applied to a metal surface.

''Single coat'' means one film of coating applied to a metal surface.

''Topcoat'' means the final film or series of films of coating applied in a two-coat (or more) operation.

''Transfer efficiency'' means the portion of coating solids that adheres to the metal surface during the application process, expressed as a percentage of the total volume of coating solids delivered by the applicator.

(2) Applicability. For the purpose of this subsection:

(A) Miscellaneous metal parts and products includes the following industrial categories:

(i) Large farm machinery such as harvesting, fertilizing and planting machines, tractors, combines, etc.,

(ii) Small farm machinery such as lawn and garden tractors, lawn mowers, rototiller, etc.,

(iii) Small appliances such as fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.,

(iv) Commercial machinery such as office equipment, computers and auxiliary equipment, typewriters, calculators, vending machines, etc.,

(v) Industrial machinery such as pumps, compressors, conveyor components, fans, blowers, transformers, etc.,

(vi) Fabricated metal products such as metal covered doors, frames, etc., and

(vii) Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), Major Group 39 (miscellaneous manufacturing industries), Major Group 40 (Railroad Transportation) and Major Group 41 (Transit Passenger Transportation); and

(B) Miscellaneous metal parts and products excludes the following items:

(i) automobiles and light duty trucks,

(ii) metal cans,

(iii) flat metal sheets and strips in the form of rolls or coils,

(iv) plastic and glass objects,

(v) magnet wire for use in electrical machinery,

(vi) metal furniture,

(vii) the exterior surface of assembled aircraft,

(viii) automobile refinishing,

(ix) customized top coating of automobiles and trucks, if production is less than 5 vehicles per day,

(x) the exterior surface of assembled marine vessels, and

(xi) large appliance parts subject to subsection (hh) of this section.

(3) Emission standards. No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may operate a coating application system subject to this subsection that emits volatile organic compounds from any coating in excess of:

(A) 0.52 kg/l (4.3 lb/gal) of coating, excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to a coating applicator that applies a clear coat;

(B) 0.42 kg/l (3.5 lb/gal) of coating, excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 90 degrees C (194 degrees F);

(C) 0.42 kg/l (3.5 lb/gal) of coating, excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to a coating applicator that applies extreme performance coatings;

(D) 0.36 kg/l (3.0 lb/gal) of coating, excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to a coating applicator for all other coatings, adhesives, fillers or sealants and coating application systems; and

(E) O.75 kg/l (6.3 lb/gal) of coating, excluding water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, delivered to a coating applicator which applies high performance architectural aluminum coatings, provided that:

(i) such applicator is located at a premises which emits three thousand three hundred thirty-three (3,333) pounds of volatile organic compounds per month or less from such applicator, and

(ii) such applicator was an existing source in Connecticut on or before November 1, 1994.

(4) This subsection applies to all application areas, flashoff areas, air and forced air dryers and ovens used in the surface coating operations pertaining to miscellaneous metal parts and products listed in subsection (s)(2) of this section. This regulation also applies to prime coat, top coat and single coat operations.

(5) If more than one emission limitation in subsection (s)(3) of this section applies to a specific coating, then the least stringent emission limitation shall be applied.

(6) All volatile organic compound emissions from solvent washings shall be considered in the emission limitations in subsection (s)(3) of this section unless the solvent is directed into containers that prevent evaporation into the atmosphere.

(7) The provisions of this subsection apply to any premises that has actual emissions of volatile organic compounds of fifteen (15) pounds per day or more in any one day from all miscellaneous metal parts and products surface coating operations on such premises unless:

(A) The total potential emissions from all surface coating operations are limited by permit or order of the commissioner to 1,666 pounds or less in any calendar month;

(B) The owner or operator is and has at all times been in compliance with such limitation since the issuance of the permit or order;

(C) The total actual emissions from all such surface coating operations have not exceeded 1,666 pounds in any calendar month since January 1987; and

(D) Notwithstanding subsections (A) through (C) of this subdivision, any surface coating operation on such premises that emitted 40 pounds or more in any day and that was subject to the requirements of this subsection prior to November 1, 1989, shall remain subject to the provisions of this subsection.

(8) After November 1, 1989 any premises that is or becomes subject to the provisions of this subsection shall remain subject to the provisions of this subsection unless the owner or operator meets the requirements of subparagraphs (A), (B) and (C) of subdivision (7) of this subsection.

(9) The owner or operator of any surface coating operation that was not subject to the requirements of this subsection prior to November 1, 1989, shall have until October 1, 1990, to comply with the requirements of this subsection for such system.

(10) Notwithstanding the requirements of this subsection, an owner or operator may use, in the aggregate, up to fifty-five (55) gallons of coatings that exceed the emission limitations set forth in subdivision (3)(A) through (3)(E), inclusive, of this subsection at such premises for any twelve (12) consecutive months, provided such owner or operator maintains records of such coatings in accordance with subsection (aa) of this section.

(t) **Manufacture of synthesized pharmaceutical products.**

(1) Definitions for the purpose of this subsection:

''Condenser'' means a device which cools a gas stream to a temperature which removes specific ''volatile organic compounds'' by condensation;

''Control system'' means any number of control devices, including condensers, which are designed and operated to reduce the quantity of ''volatile organic compounds'' emitted to the atmosphere;

''Pharmaceutical product and intermediate'' means any drug or chemical substance or any intermediate used to make a drug or chemical substance which is intended to be administered to a person or animal to prevent or cure disease or otherwise enhance physical or mental welfare;

''Process equipment exhaust system'' means a device for collecting or directing out of the work area, air laden with fugitive ''emissions'' of ''volatile organic compounds'' from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting workers from excessive ''volatile organic compounds'' exposure.

''Reactor'' means a vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions;

''Separation operation'' means a process that separates a mixture of compounds and solvents into two or more components. Specific mechanisms include extraction, centrifugation, filtration, decantion, and crystallization;

''Synthesized pharmaceutical manufacturing'' means manufacture of ''pharmaceutical products and intermediates'' by chemical syntheses. The production and recovery of materials produced via fermentation, extraction of organic chemicals from vegetative materials or animal tissues, and formulation and packaging of the product are not covered by this regulation.

(2) The owner or ''operator'' of a synthesized pharmaceutical manufacturing facility shall control the ''volatile organic compound'' ''emissions'' from all operations including but not limited to all reactors, distillation operations, crystallizers, extraction equipment, centrifuges, decanters, and vacuum dryers. Surface condensers or equivalent controls shall be used, provided that:

(A) If surface condensers are used, the outlet gas temperature the condenser must not exceed:

(i) -25°C when condensing ''volatile organic compounds'' having a vapor pressure of 40.0 kPa (5.8 psi) or greater at 20°C,

(ii) -15°C when condensing ''volatile organic compounds'' having a vapor pressure of 20.0 kPa (2.9 psi) or greater at 20°C,

(iii) 0°C when condensing ''volatile organic compounds'' having a vapor pressure of 10.0 kPa (1.5 psi) or greater at 20°C,

(iv) 10°C when condensing ''volatile organic compounds'' having a vapor pressure of 7.0 kPa (1.0 psi) or greater at 20°C, or

(v) 25°C when condensing ''volatile organic compounds'' having a vapor pressure of 3.50 kPa (0.5 psi) or greater at 20°C, or

(B) If equivalent controls are used, the ''volatile organic compound'' ''emissions'' must be reduced over each hour by at least as much as they would be by using a surface condenser which meets the requirements of subparagraph (A) of this subdivision.

(3) The owner or ''operator'' of a synthesized pharmaceutical manufacturing facility subject to this regulation shall reduce the actual ''volatile organic compound'' ''emissions'' from each air dryer and each process equipment exhaust system:

(A) by at least 90 percent over each hour if actual ''emissions'' are 150 kg/day, (330 lb/day) or more of ''volatile organic compounds''; or,

(B) to 15.0 kg/day (33.3 lb/day) or less if actual ''emissions'' are less than 150 kg/day (330 lb/day) of ''volatile organic compounds.''

(4) The owner or ''operator'' of a synthesized pharmaceutical manufacturing facility subject to this regulation shall:

(A) Provide a vapor balance system or equivalent control so that the amount of ''volatile organic compounds'' released to the ''ambient air'' is less than 80 milligrams per liter of liquid loaded per delivery from truck or railcar deliveries to storage ''tanks'' with capacities greater than 7,500 liters (2,000 gallons) that store ''volatile organic compounds'' with vapor pressures of 28.0 kPa (4.1 psi) or greater at 20°C; and,

(B) Install pressure/vacuum conservation vents on all storage ''tanks'' that store ''volatile organic compounds'' with vapor pressures of 10.0 kPa (1.5 psi) or greater at 20°C, unless a more effective control system is used which meets state fire marshal standards.

(5) The owner or ''operator'' of a synthesized pharmaceutical manufacturing facility subject to this regulation shall enclose all centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where liquid contains ''volatile organic compounds'' and has a vapor pressure of 3.50 kPa (0.5 psi) or more at 20°C.

(6) The owner or ''operator'' of a synthesized pharmaceutical manufacturing facility subject to this regulation shall install covers on all in-process ''tanks'' containing a ''volatile organic compound'' at any time. These covers must remain closed, except when production, sampling, maintenance, or inspection procedures require ''operator'' access.

(7) The owner or ''operator'' of a synthesized pharmaceutical manufacturing facility subject to this regulation shall repair all leaks from which a liquid, containing ''volatile organic compounds'' can be observed running or dripping immediately or as subject to the conditions of Sec. 22a-174-7.

(8) The provisions of this subsection apply to all ''synthesized pharmaceutical manufacturing'' equipment which has potential emissions of fifteen (15) pounds per day or more in any one day. After October 1, 1989 any ''synthesized pharmaceutical manufacturing'' equipment which is or becomes subject to the provisions of this

subsection shall remain subject to the provisions of this subsection regardless of the daily actual emissions. Notwithstanding the above, the owner or ''operator'' of any piece of equipment that was not required to meet control requirements by this subsection prior to October 1, 1989, shall have until October 1, 1990, to achieve final compliance with the control requirements of this subsection for that piece of equipment.

(u) **Manufacture of pneumatic rubber tires**

(1) For the purpose of this subsection;

''Bead dipping'' means the dipping of an assembled tire bead into a solvent based cement;

''Green tires'' means assembled tires before molding and curing have occurred.

''Green tire spraying'' means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.

''Passenger type tire'' means agricultural, airplane, industrial, mobile home, light and medium duty truck, and passenger vehicle tires with a bead diameter up to 20.0 inches and cross section dimension up to 12.8 inches.

''Pneumatic rubber tire manufacture'' means the production of pneumatic rubber, passenger type tire on a mass production basis;

''Tread end cementing'' means the application of a solvent based cement to the tire tread ends.

''Undertread cementing'' means the application of a solvent based cement to the underside of a tire tread;

''Water based sprays'' means release compounds, sprayed on the inside and outside of green tires, in which solids, water, and emulsifiers have been substituted for organic solvents so that the volatile organic compound content is less than four percent by weight for an inside spray and less than twelve percent by weight for an outside spray.

(2) The owner or ''operator'' of any undertread cementing, tread end cementing, or bead dipping operation shall:

(A) Install and operate a capture system, designed to achieve maximum reasonable capture, of at least 85 percent by weight of ''volatile organic compounds'' emitted, from all undertread cementing, tread end cementing and bead dipping operations. Maximum reasonable capture shall be consistent with the following documents:

(i) Industrial ventilation, a manual of recommended practices, 14th edition, American Federation of Industrial Hygienists.

(ii) Recommended industrial ventilation guidelines, U.S. Department of Health, Education and Welfare, National Institute of Occupational Safety and Health.

(B) Install and operate a control device that meets the requirements of one of the following:

(i) A carbon adsorption system designed and operated in a manner such that there is at least a 90.0 percent removal of ''volatile organic compounds'' by weight from the gases ducted to the control device for each adsorption cycle or 24 hours whichever is shorter; or,

(ii) An incineration system that oxidizes at least 90.0 percent per hour of the nonmethane ''volatile organic compounds'' (measured as total combustible carbon) which enter the ''incinerator'' to carbon dioxide and water.

(iii) An alternative ''volatile organic compounds'' ''emission'' reduction system certified by the owner or ''operator'' to have at least a 90.0 percent reduction

efficiency per hour, measured across the control system, and has been approved by the ''Commissioner.''

(3) The owner or ''operator'' of any green tire spraying operation must implement one of the following means of reducing ''volatile organic compound'' ''emissions'':

(A) Substitute water-based sprays for the normal solvent-based mold release compound; or,

(B) Install a capture system designed and operated in a manner that will capture and transfer at least 90.0 percent of the ''volatile organic compounds'' emitted by the green tire spraying operation to a control device, and, in addition, install and operate a control device that meets the requirements of one of the following:

(i) a carbon adsorption system designed and operated in a manner such that there is at least 90.0 percent removal of ''volatile organic compounds'' by weight over each cycle from the gases ducted to the control device; or,

(ii) An incineration system that oxidizes at least 90.0 percent of the nonmethane ''volatile organic compounds'' (measured as total combustible carbon) per hour to carbon dioxide and water; or

(iii) an alternative ''volatile organic compound'' ''emission'' reduction system certified by the owner or ''operator'' to have at least a 90.0 percent reduction efficiency, per hour as measured across the control system, that has been approved by the ''Commissioner.''

(4) The provisions of this regulation do not apply to the production of specialty tires for antique or other vehicles when produced on an irregular basis or with short production runs. This exemption applies only to tires produced on equipment separate from normal production lines for passenger type tires.

(v) **Graphic arts rotogravures and flexography.**

(1) For the purpose of this subsection:

''Flexographic printing'' means the application of words, designs or pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

''Packaging rotogravure printing'' means rotogravure printing upon paper, paperboard, metal foil, plastic film or other substrates, which are, in subsequent operations, formed into packaging products or labels for articles to be sold.

''Publication rotogravure printing'' means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements or other types of printed materials.

''Roll printing'' means the application of words, designs or pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

''Rotogravure printing'' means the application of words, designs or pictures to a substrate by means of a roll printing technique which involves intaglio or recessed image areas in the form of cells or indentations.

(2) The owner or operator of a packaging rotogravure, publication rotogravure or flexographic printing facility subject to this regulation and employing solvent containing ink shall not cause, or permit the discharge into the atmosphere, of any volatile organic compounds unless:

(A) The volatile fraction of each ink, as it is applied to the substrate, contains 25.0 percent by volume or less of volatile organic compounds and 75.0 percent by volume or more of water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time; or

(B) Each ink as it is applied to the substrate, less water and exempt volatile organic compounds listed in 40 CFR 51.100(s) as amended from time to time, contains 60.0 percent by volume or more nonvolatile material; or

(C) The owner or operator installs and operates:

(i) A carbon adsorption system that reduces the volatile organic emissions from the capture system by at least 90.0 percent by weight over the adsorption cycle or 24 hours whichever is shorter,

(ii) An incineration system provided that 90.0 percent of the nonmethane volatile organic compounds (measured as total combustible carbon) that enter the incinerator per hour are oxidized to carbon dioxide and water, or

(iii) A system demonstrated to have control efficiency equivalent to or greater than the above required 90% (ninety percent) and approved by the commissioner by permit or order.

(3) A capture system shall be used in conjunction with the emission control systems in subdivision (2)(C) of this subsection. The design and operation of a capture system shall be consistent with good engineering practice, and shall provide for an overall reduction in volatile organic compound emissions per hour from each printing press of at least:

(A) 75.0 percent where a publication rotogravure process is employed;

(B) 65.0 percent where a packaging rotogravure process is employed; or,

(C) 60.0 percent where a flexographic printing process is employed.

(4) The provisions of this subsection apply to any printing line that has actual emissions of forty (40) pounds per day or more in any one day or to a premises which has potential emissions from all printing operations of fifty (50) tons or more per calendar year in an area designated as a serious nonattainment area for ozone or twenty-five (25) tons or more per calendar year in an area designated as a severe nonattainment area for ozone. Any printing line that is or becomes subject to the provisions of this subsection shall remain subject to the provisions of this subsection regardless of the daily actual emissions.

Notwithstanding the foregoing provisions of this subdivision, the owner or operator of any piece of equipment that was not required to meet control requirements by this subsection prior to November 15, 1992 shall comply with the control requirements of this subsection for that piece of equipment no later than May 31, 1995.

(5) In lieu of requiring an owner or operator to implement reasonably available control technology pursuant to this subsection, the commissioner may, by permit or order, limit potential emissions of volatile organic compounds to:

(A) less than fifty (50) tons per calendar year in a serious nonattainment area for ozone; or

(B) less than twenty-five (25) tons per calendar year in a severe nonattainment area for ozone.

The Commissioner may also limit in such permit or order actual emissions of volatile organic compounds from any printing line at such premises to less than forty (40) pounds per day.

(6) The commissioner shall not issue an order or permit limiting emissions of volatile organic compounds as provided in subdivision (5) of this subsection unless the owner or operator demonstrates, in writing, that actual emissions of volatile organic compounds, in each calendar year after December 31, 1989, did not exceed: fifty (50) tons per calendar year in a serious nonattainment area for ozone; or (b) twenty-five (25) tons per calendar year in a severe nonattainment area for ozone.

(7) To demonstrate that actual volatile organic compound emissions did not exceed the emission limitations described in subdivision (6) of this subsection, such owner or operator shall submit to the commissioner written documentation of the actual emissions of volatile organic compounds from all printing operations at such premises for every calendar year, or portion thereof, from December 31, 1989 through the calendar year in which such information is submitted. Such owner or operator shall also submit to the commissioner the information specified in subsection (aa) of this section for every calendar year, or portion thereof, from December 31, 1989 through the calendar year in which such information is submitted. The owner or operator shall also include a certification with such information prepared and signed as required by section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies.

(w) **Dry cleaning facilities**

(1) For the purpose of this subsection:

''Dry cleaning facility'' means a facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of solvent by spinning, and drying by tumbling in an airstream. The facility includes but is not limited to any washer, dryer, filter and purification systems, waste disposal systems, holding ''tanks,'' pumps, and attendant piping and valves. Dry cleaning facility includes those which are coin-operated and intended for general public use.

(2) The owner or ''operator'' of a dry cleaning facility which uses perchloroethylene shall;

(A) vent all dryer exhausts through carbon adsorption systems or equally effective control devices and maintain ''emissions'' of ''volatile organic compounds'' at all times no greater than 100 ppmv as measured before dilution.

(B) maintain all system components so as to prevent the leaking of liquid ''volatile organic compounds'' and where applicable, prevent perceptible vapor losses from gaskets, seals, ducts and related equipment;

(C) treat all diatomaceous earth filters so that the residue contains no greater than 25 Kg of volatile organic ''emissions'' per 100 Kg of wet waste material;

(D) reduce the ''volatile organic compounds'' from all solvent stills to no greater than 60 Kg per 100 Kg of wet waste material; and

(E) drain all filtration cartridges in the filter housing for at least 24 hours before discarding the cartridges such that volatile organic compounds are not emitted to the atmosphere.

(3) The provisions of subparagraph (2) (A) shall not apply to dry cleaning facilities which lack adequate space or sufficient steam capacity to accommodate adsorber systems, or any facility which could demonstrate economic hardship due to compliance with this subsection. An exemption pursuant to this subsection shall be approved at the discretion of the ''Commissioner'' and the administrator after demonstration by the owner or ''operator'' of applicability to the conditions of this exemption.

(4) Compliance with this section shall be determined by:

(A) a visual inspection, for subparagraphs (2) (B) and (2) (E) above; and

(B) a test consistent with EPA Guideline series document, ''Measurement of Volatile Organic Compounds,'' EPA-450/2-78-041 or use of a system which has been demonstrated to meet the ''emission'' limits for subparagraph (2) (A) above; and

(C) Use of American Society for Testing and Materials (ASTM) Method D-322-67 for subparagraphs (2) (C) and (2) (D) above with the following modifications: a sample of the wet waste to be disposed of is taken from each of three different

batches of waste materials; each of the three samples is analyzed using ASTM Method D322-67 modified by using a Bidwell-Sterling type distillation trap in place of a gasoline dilution trap and by adding a known sample mass to the sample flask instead of a known sample volume so as to obtain a percent by weight of perchloroethylene in the waste material.

(x) **Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical & Polymer Manufacturing Equipment.**

(1) Definitions.

For purposes of this subsection:

''Canned pumps'' means those pumps not having an externally activated shaft penetrating the pump housing.

''Fugitive emission source'' means each pump, valve, safety/relief valve, open-ended valve, flange or other connector, seals, compressor, or sampling system;

''Gaseous VOCs'' means VOCs which are or will become entirely gaseous before reaching the ambient air;

''Hydrocarbon detector'' means a portable hydrocarbon analyzer for identifying leaks of VOC and meets the criteria given in EPA Reference Method 21;

''In light liquid service'' means that a component is in contact with a fluid containing 10% or greater light liquid by weight.

''In VOC service'' means that a component is in contact with a fluid containing 10% or greater VOC by weight.

''Light liquids'' means a fluid whose vapor pressure is greater than 0.044 psia (0.3 kilopascals) at 20° C;

''Quarter'' means a consecutive three month period beginning in either January, April, July or October;

''Synthetic Organic Chemical and Polymer Manufacturing'' means the industry that produces, as intermediates or final products methyl tert-butyl ether (MTBE), polyethylene, polypropylene, polystyrene, one or more of the chemicals listed in 40 CFR Part 60.489 or such other industries as the ''Commissioner'' may determine to be sources of significant VOC leakage;

(2) Applicability.

Except as provided in subdivision (x) (13) of section 22a-174-20, on or after the effective date of this subsection, the provisions of subsection 22a-174-20 (x) apply to synthetic organic chemical and polymer manufacturing facilities.

(3) Leak prevention.

The owner or operator of a synthetic organic chemical or polymer manufacturing facility shall not cause, allow, or permit any evidence of leakage as determined through the use of test methods required in subdivision (x) (8) of section 22a-174-20.

(4) Pump repair.

Except as provided in subparagraph (x) (13) (F) of section 22a-174-20, the owner or operator shall visually inspect every pump in light liquid service each week. If indications of liquid leakage are found, the pump shall be repaired within fifteen (15) days after detection except as provided in subdivision (x) (12) of section 22a-174-20. Record keeping under this subsection shall be required only for those pumps found leaking.

(5) Monitoring.

(A) Except as provided in subdivisions (x) (9) and (x) (13) of section 22a-174-20, the owner or operator shall monitor each pump, valve, compressor, and safety/relief valve in gas/vapor service or in light liquid service for gaseous leaks at least once each quarter. The owner or operator shall notify the Department's Air

Compliance Unit of such monitoring at least ten (10) days prior to the scheduled monitoring. If there is evidence of leakage, the owner or operator shall repair the component within fifteen (15) days of detection, except as provided in subdivision (x) (12) of section 22a-174-20. The monitoring procedure shall be in accordance with EPA Method 21.

(B) Safety/relief valves shall be monitored after each over-pressure relief to ensure the valve has been properly reseated so that a concentration of volatile organic compounds is less than 1000 ppm. The monitoring procedure shall be in accordance with EPA Method 21.

(6) Requirements for an open-ended valve.

The owner or operator shall install on each open-ended valve or line a cap, a blind flange, a plug, or a second closed valve which must remain attached to seal the open ended valve at all times except during operations requiring process fluid flow through the open line except in circumstances, as approved by the ''Commissioner'' by permit or order, where this may cause a safety problem.

(7) Leak detection.

The owner or operator of any fugitive emission source which appears to be leaking on the basis of sight, smell, or sound shall repair such leak within fifteen (15) days after detection except as provided in subdivision (x) (10) of section 22a-174-20.

(8) Test methods.

The owner or operator of the source shall either use:

(A) a soap solution to detect gaseous VOCs leaks at all points of potential leakage where this test method is determined to be valid by the Commissioner or his representative and where any bubble formation during a three (3) minute observation period is deemed evidence of leakage; or

(B) a hydrocarbon detector test to detect gaseous VOCs and light liquid leaks where any measured concentration in excess of ten thousand (10,000) ppm is deemed to be evidence of leakage.

(9) Exemption from Quarterly Testing.

If after four consecutive quarters of monitoring less than two percent of the valves in gas/vapor or light liquid service show evidence of leakage then the owner or operator may monitor the valves for gaseous leaks only once a year during the third or fourth quarter. If the number of valves showing evidence of leakage remains at two percent or less, then these valves need only be monitored once a year during the third or fourth quarter. However, if more than two percent of these valves show evidence of leakage, they shall be monitored every quarter until four consecutive quarters are monitored which have no more than two percent of these valves showing evidence of leakage.

(10) Delaying repairs.

A request to delay a repair of a fugitive emission source until the next turnaround if the repair is infeasible for technical or safety reasons without a complete or partial shutdown of the process unit can be made to the Commissioner.

(11) Record keeping.

The owner or operator of the facility shall maintain for two (2) years records which will be available to Department personnel on request and shall include:

(A) identification of the source being inspected or monitored;

(B) dates of inspection or monitoring;

(C) result of inspection or monitoring;

(D) what action was taken if a leak was detected;

(E) type of repair made and date of repair;

(F) if the repair was delayed, an explanation as to why; and

(G) test method.

(12) Notice and retests.

Any evidence of leakage as described in this subsection shall also be treated as a malfunction of control equipment or methods as described in section 22a-174-7. Corrective actions shall be taken in accordance with the provisions of subsection 22a-174-7 (c). A retest in accordance with the provisions of subdivision (x) (8) of section 22a-174-20 must be performed immediately after all required repairs are complete.

(13) Exemptions.

(A) The owner or operator of any facility exempted under 40 CFR Part 60.480 (d) shall be exempt from subsection (x) of section 22a-174-20.

(B) When a fugitive emission source is unsafe to monitor because of extreme temperatures, pressure, or because it is more than 12 feet above a permanent support surface, or other reasons, the owner or operator may request a waiver from quarterly testing from the Commissioner who may allow monitoring less frequently than each quarter provided the source is monitored once a year.

(C) No monitoring will be required under conditions where no leakage can occur such as fugitive emission sources under vacuum. If such tests are run, leak free conditions will not be counted toward reductions in testing frequency.

(D) Safety relief valves that are isolated from the process by a frangible disc or rupture disc are exempted from the quarterly monitoring requirements of subparagraph (x) (5) (A) of section 22a-174-20 provided they are monitored on an annual basis.

(E) Canned pumps which have demonstated compliance with 40 CFR Part 60.482-2 (e) (2) may be exempted from the requirements of subparagraph (x) (5) (A) of section 22a-174-20 provided they meet the requirements of 40 CFR Part 60.482-2 (e) (3).

(F) Canned pumps which have demonstrated compliance with 40 CFR Part 60.482-2 (e) (2) are exempted from the provisions of subdivision (x) (4) of section 22a-174-20 provided they meet the requirements of 40 CFR Part 60.482-2 (e) (3).

(y) **Manufacture of Polystyrene Resins.**

(1) Definitions.

For purposes of this subsection:

''Continuous polystyrene resin manufacturing facility'' means a facility that utilizes a continuous, co-polymerization process for the manufacture of polystyrene resin from styrene and other monomers and/or polymers.

''Styrene condenser vent stream'' means the exhaust stream from the vacuum system on the vacuum devolatilizer condenser.

''Styrene recovery unit condenser vent stream'' means the exhaust stream from a vacuum system on a styrene recovery system.

(2) Emission Standards.

On or after the effective date of this subsection the owner or operator of a continuous polystyrene resin manufacturing facility subject to this subsection shall not cause or permit the discharge of any volatile organic compounds in excess of 0.12 kg of VOC/1000 kg of product (0.24 lbs. of VOC/2000 lbs. of product) over any one (1) hour period in total from:

(A) the styrene condenser vent stream; and

(B) the styrene recovery unit condenser vent stream.

(3) Control Methods.

The owner or operator of a continuous polystyrene resin manufacturing facility subject to this subsection shall achieve the emission limitation by the use of:

(A) surface condensers; or

(B) a system demonstrated to have a control efficiency equivalent to or greater than the above, and approved by the Commissioner.

(4) Testing.

The owner or operator of the source shall determine compliance with this subsection by means of an emissions test made in accordance with the methods in subdivision (y) (6) of section 22a-174-20 and which has been approved by the Commissioner under the provisions of section 22a-174-5.

(5) Test Conditions.

The production rate during emission testing shall be determined from the current plant production records. If the plant production records show minor variation in the rate of polymer production, then an average or typical value may be used by the ''Commissioner'' when approving the test method under section 22a-174-5.

(6) Test Methods.

The emission rate for total volatile organic compounds measured as organic carbon per quantity of polystyrene produced shall be determined using either of the methods described in subparagraphs (y) (6) (A) or (y) (6) (B) of section 22a-174-20 as follows:

(A)

$$M = \frac{(C)\ (Qsd)\ (0.50 \times 10^{-3})}{S}$$

Where:

M = Emission of volatile organic compound emissions per quantity of product produced (Kg VOC/1000 Kg product).

C = Total gaseous non-methane organic concentration of the effluent (ppm carbon equivalent) as measured by method 25 as found at Appendix A of Title 40 Code of Federal Regulations Part 60.

Qsd = Dry volumetric stack gas flow rate corrected to standard conditions (dcsm/hr).

S = Production rate during the emission test (Kg/hr).

(B)

$$M = \frac{(2.494 \times 10^{-3})\ (\ \ _{i=1}^{n} E\ \ Ci\ Wi\ )\ (Qs)}{S}$$

Where:

M = Emission of volatile organic compound emissions per quantity of product produced (Kg VOC/1000 Kg product).

Ci = Concentration of sample component i, (ppm) as measured by method 18 as found at Appendix A of Title 40 Code of Federal Regulations Part 60.

Wi = Molecular weight of sample component i, (g VOC/gmole VOC).

Qs = Volumetric stack gas flow rate corrected to standard conditions (scm/min).

S = Production rate during the emission tests (Kg/hr).

(7) Record keeping.

(A) The owner or operator of the source shall monitor the operating parameters of the air pollution control equipment on the polystyrene production operation. The parameters monitored shall include, but not be limited to, the outlet temperature of the styrene condenser vent and the styrene recovery unit condenser vent or the outlet temperature of all condensers used to control these exhaust streams. The Commissioner may allow periodic monitoring if continuous monitoring is technolog-

ically or economically infeasible. The Commissioner may require additional monitoring as needed.

(B) The owner or operator of the source shall maintain monitoring records for a period of two years and shall make the records available to Department personnel upon request.

(z) [Reserved]

(aa) **Record keeping requirements and test methods.**

(1) The owner or ''operator'' of any premise subject to the provisions of subsections (m) through (s) inclusive and subsection (v) of section 22a-174-20 shall maintain daily records of all coatings and diluents used. Such records shall be kept for each individual machine, operation or coating line. The records must contain the information required below.

(A) description of the coating including the coating name and the coating density in pounds per gallon;

(B) ''volatile organic compound'' content by weight;

(C) water and exempt volatile organic compound content by weight;

(D) non-volatile content by volume and by weight;

(E) amount of each coating used in gallons;

(F) total amount of diluent used for each coating in pounds and in gallons.

(2) Any owner or ''operator'' may request sample forms from the ''Commissioner.''

(3) The owner or ''operator'' of any premise subject to the provisions of subdivision 22a-174-20 (b) (1) shall maintain the following records for the premise:

(A) daily throughput of all volatile organic compounds having a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions; and

(B) records of both scheduled and unscheduled maintenance of the ''vapor recovery system.''

(4) The owner or ''operator'' of any premise subject to the provisions of subdivision 22a-174-20 (b) (4) shall maintain the following records for the premise:

(A) daily throughput of all volatile organic compounds having a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions; and

(B) records of both scheduled and unscheduled maintenance of the ''vapor balance system.''

(5) The owner or ''operator'' of any premise subject to the provisions of subdivisions 22a-174-20 (b) (5) or (b) (6) shall maintain the following records for the premise:

(A) daily throughput of gasoline; and

(B) records of both scheduled and unscheduled maintenance of the ''vapor balance system'' and other system components.

(6) For determining the volatile content of surface coatings, the owner or ''operator'' of any premise subject to this section shall use either Reference Method 24 or 24A as found at Appendix A of Title 40 Code of Federal Regulations Part 60. When determining the volatile fraction of a coating using American Society for Testing and Materials method D-2369, the bake time must be one (1) hour.

(7) For determining the ''volatile organic compound'' emission control efficiency, the owner or ''operator'' of any premise subject to this section shall determine the removal efficiency of the control device by using reference methods 18, 25, 25A or 25B as found at Appendix A of Title 40 Code of Federal Regulations Part 60. The owner or ''operator'' of any premise subject to this section shall determine

capture efficiency using a test method recommended or approved by the ''administrator.''

(8) The owner or ''operator'' of any ''major stationary source'' subject to this section shall continuously monitor and record the following:

(A) for thermal incinerators, the exhaust gas temperature.

(B) For catalytic incinerators, the exhaust gas temperature and the temperature rise across the catalyst bed.

(C) For condensers or refrigeration systems, the inlet temperature of the cooling medium and the exhaust gas temperature.

(D) For carbon absorbers, the pressure drop across the absorber and the hydrocarbon level needed to determine breakthrough.

(9) The owner or ''operator'' of any ''stationary source'' subject to this section which uses a catalytic incinerator to control the emission of ''volatile organic compounds'' shall record the date of the each change of the catalyst in the bed.

(10) Copies of all records and reports required by subsection 22a-174-20 (aa) must be kept at the source for a minimum of two years.

(bb) **Compliance methods.**

(1) The owner or ''operator'' of a ''stationary source'' subject to subsections (m) through (s) of Section 22a-174-20 inclusive, shall achieve the ''emission'' limit under the appropriate paragraph by:

(A) The application of low solvent content coating technology for each coating used; or

(B) Incineration, provided that a minimum of ninety (90) percent of the nonmethane ''volatile organic compounds'' (measured as total combustible carbon) which enter the ''incinerator'' are oxidized to carbon dioxide and water per hour and where the overall required efficiency is determined pursuant to subdivision (bb) (3) or (bb) (4); or

(C) A system demonstrated to have an hourly control efficiency equivalent to or greater than the above and approved by the ''Commissioner'' by permit or order.

(2) A capture system used in conjunction with the ''emission'' control systems in subparagraphs (bb) (1) (B) and (bb) (1) (C) of Section 22a-174-20 must be capable of collecting a minimum of ninety (90) percent of the ''volatile organic compound'' ''emissions'' from the ''process source.''

(3) In cases where control technology is the selected compliance option, the minimum overall reduction of volatile organic compounds, required to demonstrate compliance with subsections (m) through (s) of Section 22a-174-20 inclusive, shall be the least stringent of the following:

(A) at least ninety-five (95) percent; or

(B) the amount necessary to reduce the hourly actual ''volatile organic compound'' emissions to less than the hourly allowable ''volatile organic compound'' emissions as determined in subdivision (6) of this subsection.

(4) If either the minimum capture system efficiency requirement or the minimum control efficiency requirement, specified above, cannot be reasonably demonstrated, the Commissioner may accept an averaged system efficiency provided the net emission rate is equal to or less than the emission rate which would result through compliance with the control system and capture system minimum efficiencies required by subdivisions (bb) (1) and (bb) (2) of Section 22a-174-20.

(5) Compliance proposals pursuant to subsection (cc) of Section 22a-174-20, alternative emission reduction plans, must utilize the calculation methods described by subdivision (bb) (3) of Section 22a-174-20 concerning solids-applied basis com-

putations and the system efficiency requirements of subsections (bb) (1) (B) and (bb) (2) of Section 22a-174-20. For purposes of subsection (cc) of Section 22a-174-20, ''allowable emissions'' are based on the solids-applied basis emissions rather than the minimum required system efficiency. If the emissions after the application of control equipment, represent a greater net reduction of volatile organic compound emissions, the increased reduction may be used as a credit to offset excess emissions from non-conforming sources at the premise.

(6) To calculate hourly allowable ''volatile organic compound'' (VOC) emissions under subdivision (3) of this subsection, follow the steps in subparagraphs (A) through (D) below.

(A) Determine the discharge limit (in pounds of VOC per gallon of coating) for the surface coating operation in subsections 22a-174-20 (m) through (s).

(B) Locate the discharge limit in the left hand column of Table 20 (bb)-1 below.

(C) Locate the corresponding emission limit (in pounds of VOC per gallon of solids) from the right hand column of Table 20 (bb)-1 below.

(D) Multiply the emission limit (in pounds of VOC per gallon of solids) by the hourly volume of solids applied (in gallons per hour) during the subject surface coating operation to yield the hourly allowable VOC emissions (in pounds per hour).

Table 20 (bb)-1

Emission Factors for Volatile Organic Compounds for Solids Applied

pounds of VOC / gallon of coating	pounds of VOC / gallon of solids
1.7	2.21
2.6	4.02
2.8	4.52
2.9	4.79
3.0	5.07
3.5	6.68
3.7	7.44
3.8	7.85
4.2	9.79
4.3	10.34
5.5	21.74

(cc) **Alternative emission reductions.**

(cc) (1) The owner or ''operator'' of a ''stationary source'' subject to the provisions of subsections (m) through (v) inclusive and (ee) may submit for the consideration of the ''Commissioner'' an alternative ''emission'' reduction plan which would achieve the same net ''emission'' reduction as the owner or ''operator'' would achieve by having each ''emission'' source comply with the prescribed ''emission limitations'' provided in these regulations. Approval of the alternative plan is discretionary with the ''Commissioner,'' but at a minimum, the owner or ''operator'' of the ''stationary source'' must demonstrate that:

(A) by means of an approved material balance or acceptable ''emission'' test, sufficient reductions in ''volatile organic compound'' ''emissions'' will be obtained by controlling other existing emission sources of similar ''volatile organic compounds'' within the ''stationary source'' to the extent necessary to compensate for all excess ''emissions'' which result from one or more emission sources not achieving

the prescribed ''emission limitation.'' This demonstration must be submitted in writing and must include:

(i) A description of the emission source or ''sources'' which will not comply with the prescribed ''emission limitations'';

(ii) Pounds per hour of ''volatile organic compounds'' emitted which are in excess of permissible ''emissions'' for each emission source;

(iii) A description of each emission source and the related control systems if any, for those emission sources within the ''stationary source'' where ''emissions'' will be decreased to compensate for excess ''emissions'' from each emission source;

(iv) Pounds per hour of ''volatile organic compounds'', for each emission source both before and after the improvement or installation of any applicable control system, or any physical or operational changes at the facility to reduce ''emissions'' and the date on which these reductions will be achieved; and

(v) A description of the procedures and methods used to determine the ''emissions'' of ''volatile organic compounds''; and

(B) The alternative emission reduction plan does not include decreases in ''emissions'' resulting from requirements of other applicable ''air pollution'' regulations. The alternative emission reduction plan may include decreases in ''emissions'' accomplished through installation or improvement of a control system or through physical or operational changes at the ''stationary source'' such as increased transfer efficiencies;

(C) The alternative emission reduction plan does not include provisions for the trade off of any ''volatile organic compound'' such as benzene which the ''Administrator'' or ''Commissioner'' has determined to be a hazardous material;

(D) The alternative emission plan does not delay or defer the compliance deadlines for any emission source or ''sources''; and

(E) The alternative emission plan meets all the requirements of the ''Emissions Trading Policy Statement'' of the U.S. Environmental Protection Agency as specified in the December 4, 1986 Federal Register (51FR 43814).

(cc) (2) The implementation of an alternative emission reduction plan instead of compliance with the ''emissions limitation'' prescribed in subsections (m) through (v) inclusive and (ee) must be expressly approved by the ''Commissioner'' through the issuance of an order in accordance with the provisions of section 22a-174-12 and approved by the ''administrator'' in accordance with the provisions of 42 U.S.C. 7401-7642. After approval, any emissions in excess of those established for each emission source under the plan will be a violation of these regulations.

(cc) (3) Where it can be shown to the satisfaction of the ''Commissioner'' that an emission source cannot be controlled to comply with subsections (m) through (v) inclusive and (ee) of this section for reasons of technological and economic feasibility, the ''Commissioner'' may by permit accept a lesser degree of control upon the submission of satisfactory evidence that the ''stationary source'' owner has applied ''Reasonably Available Control Technology'' and has a plan to develop the technologies necessary to comply with the above subsections and such action is approved by the ''administrator'' in accordance with the provisions of 42 U.S.C. 7401-7642.

(dd) **Seasonal operation of afterburners.**

(dd) (1) The owner or ''operator'' of any ''stationary source'' which uses a natural gas-fired afterburner to meet the requirements of subdivisions (f) (1), (f) (2), (f) (4) or subsections (m) through (v) inclusive and (ee) may petition the ''Commissioner'' for permission to discontinue the operation of the afterburner during the

months of November, December, January, February and March. The owner or ''operator'' shall submit the petition in writing and shall include the following information:

(A) Information on the nature and location of the facility of process for which the application is made;

(B) The type and quantity of ''emissions'' that will occur during the period of shutdown;

(C) The quantity of natural gas saved as a result of the shutdown;

(D) Any other relevant information the ''Commissioner'' may request in order to make a determination regarding the petition.

(dd) (2) The owner or ''operator'' of any ''stationary source'' for which a petition has been submitted in accordance with subdivision (dd) (1) shall:

(A) Publish by prominent advertisement in the ''region'' affected a notice that the petition has been submitted;

(B) Have made available for public inspection for thirty (30) days a copy of the petition.

(dd) (3) The ''Commissioner'' shall not grant a petition to discontinue the operation of a gas-fired afterburner which:

(A) Is required to meet the requirements of any other section of these regulations; or

(B) Will prevent or interfere with the ''attainment'' or maintenance of any federal or state ''ambient air quality standard'';

(iii) Has not met the requirements of subdivision (dd) (2).

(dd) (4) The ''Commissioner'' may attach any reasonable conditions he deems necessary or desirable to any approval of a petition under this subsection including but not limited to:

(A) Requirements for special control measures to be taken by the owner or ''operator'' to minimize ''emissions'' during the period of the petition;

(B) Requirements for periodic reports submitted by the owner or ''operator'' relating to ''emissions,'' to compliance with any other conditions under which the petition is granted, or to any other relevant information the ''Commissioner'' deems necessary.

(dd) (5) Following the decision to approve or deny the petition the ''Commissioner'' shall cause an order to be issued in accordance with the provisions of section 22a-174-12.

(ee) **Reasonably Available Control Technology for large sources.** The owner or operator of any premises with potential emissions of volatile organic compounds shall use Reasonably Available Control Technology in accordance with the provisions of section 22a-174-32 of the Regulations of Connecticut State Agencies on each source to limit the discharge of volatile organic compounds unless all the sources emitting volatile organic compounds at such premises are regulated by:

(1) any one of the following subsections of section 22a-174-20 of the Regulations of Connecticut State Agencies: (a), (b), (*l*) through (y) or (ff) through (jj);

(2) section 22a-174-30 of the Regulations of Connecticut State Agencies; or

(3) an order to implement reasonably available control technology issued by the Commissioner pursuant to this subsection prior to November 15, 1992 and approved by the Administrator prior to May 31, 1995. An order or permit to limit potential emissions of volatile organic compounds to less than 100 tons per year for any twelve (12) consecutive months shall not be considered an order to implement Reasonably Available Control Technology.

(ff) **Flexible package printing.**

(1) Definitions. For the purpose of this subsection:

(A) ''Capture efficiency'' means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from operation of a flexible package printing press and related cleaning, expressed as a percentage;

(B) ''Cleaning'' means, with respect to a flexible package printing press or presses, cleaning of a press or press parts or the removal of dried ink from areas around the press. ''Cleaning'' does not include cleaning of electronic components, cleaning in platemaking or binding operations, housekeeping activity near a press or the use of a parts washer or cold cleaner;

(C) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(D) ''Flexible package'' means any package or part of a package the shape of which may be readily changed. A ''flexible package'' includes any bag, pouch, liner or wrap made of paper, plastic, film, aluminum foil, or metalized or coated film or paper, alone or in combination. ''Flexible package'' does not include any folding carton, self-adhesive labels, gift wrap, wall covering, vinyl products, decorative laminates, floor coverings or tissue products;

(E) ''Flexographic print station'' means a work station on which a flexographic printing operation is conducted, which includes a flexographic printing plate and an image carrier made of rubber or other elastomeric material and where the image to be printed is raised above the printing plate;

(F) ''Installation date'' means an unchanging date that is the first date on which a piece of equipment is in place and prepared to operate;

(G) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency;

(H) ''Press'' means a printing production assembly that is composed of one or more work stations, one or more of which is a flexographic or rotogravure print station, and that produces a printed product;

(I) ''Rotogravure print station'' means a work station on which a rotogravure printing operation is conducted. A rotogravure print station includes a cylinder and ink supply, and the image to be printed is etched or engraved below the surface of the cylinder;

(J) ''Work station'' means a unit on a press where material is deposited onto a substrate; and

(K) ''As-applied VOC content'' means the VOC content of an ink, coating, adhesive or cleaning solvent at the time of application to a substrate, including any solvent, catalyst or other substance added to the as-supplied ink, coating, adhesive or cleaning solvent. ''As-applied VOC content'' is determined using an EPA reference method, a California Air Resources Board reference method or other method approved by the commissioner.

(2) Applicability.

(A) The provisions of this subsection apply to the owner or operator of any flexible package printing press who purchases for the printing operation at least 855 gallons of coatings, adhesives, cleaning solvents and solvent-based inks in aggregate per any rolling 12-month period. Any owner or operator of a flexible package printing press shall:

(i) Comply with the requirements of this subsection no later than January 1, 2011, and

(ii) Remain subject to this subsection; and

(B) Any flexible package printing press operated pursuant to this subsection shall not be subject to subsection (v) of this section.

(3) Work practices. Each owner or operator shall use the following work practices:

(A) New and used VOC-containing ink, coating, adhesive or cleaning solvent, including ink or coating mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of VOC-containing ink, coating, adhesive or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing ink, coating or cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper, which are moistened with VOC-containing ink, coating, adhesive or solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and

(D) VOC-containing ink, coating, adhesive and cleaning solvent shall be conveyed from one location to another in a closed container or pipe.

(4) Additional requirements. The owner or operator of a flexible package printing press that has the potential to emit from the dryer, prior to controls, of at least 25 tons per year of VOC from the use of inks, coatings and adhesives combined shall, in addition to complying with the requirements of subdivision (3) of this subsection, use one of the following methods to control VOC emissions from such a press:

(A) Use only individual inks, coatings and adhesives with an as-applied VOC content that does not exceed 0.8 kg VOC/kg of solids (0.8 lb VOC/lb of solids) or 0.16 kg VOC/kg of materials (0.16 lb VOC/lb of materials);

(B) Use only inks, coatings and adhesives so that the daily weighted average of the VOC content of the inks, coatings and adhesives used in a single printing line does not exceed 0.8 kg VOC/kg of solids (0.8 lb VOC/lb of solids) or 0.16 kg VOC/kg of materials (0.16 lb VOC/lb of materials); or

(C) Install, operate and maintain in accordance with the manufacturer's recommendations, a capture and a control device that produce the overall control efficiency identified in Table 20(ff)-1, according to the date of installation of the press being controlled and the installation date of the air pollution control equipment.

(5) Records.

(A) An owner or operator of any flexible package printing press shall maintain records of the information described in subparagraph (B) of this subdivision. All such records shall be:

(i) Made available to the commissioner to inspect and copy upon request, and

(ii) Maintained for five years from the date such record is created.

(B) An owner or operator of a flexible package printing press shall maintain daily records of all inks, coatings, adhesives or cleaning solvents used, as follows:

(i) Name and description of each ink, coating, adhesive or cleaning solvent,

(ii) VOC content of each ink, coating, adhesive or cleaning solvent, as-applied, and the associated calculations,

(iii) VOC content of each ink, coating, adhesive or cleaning solvent, as supplied,

(iv) The amount of each ink, coating, adhesive or cleaning solvent,

(v) A Material Safety Data Sheet for each ink, coating, adhesive or cleaning solvent,

(vi) Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the commissioner, and

(vii) Date and type of maintenance performed on air pollution control equipment, if applicable.

(C) Any owner or operator of any flexible package printing press who is not otherwise subject to the provisions of this subsection shall maintain material purchase records to verify that the provisions of this subsection do not apply to such owner or operator.

Table 20(ff)-1. Overall control efficiency levels

Installation date of press	*Installation date of the air pollution control device*	*Overall control efficiency (%)*
Prior to March 14, 1995	Prior to January 1, 2011	65
Prior to March 14, 1995	On or after January 1, 2011	70
On or after March 14, 1995	Prior to January 1, 2011	75
On or after March 14, 1995	On or after January 1, 2011	80

(gg) **Offset lithographic printing and letterpress printing**

(1) Definitions. For the purpose of this subsection:

(A) ''Capture efficiency'' means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from offset lithographic or letterpress printing and related cleaning, expressed as a percentage;

(B) ''Cleaning solvent'' means a VOC-containing liquid used to remove ink and debris from the operating surfaces of the printing press and its parts;

(C) ''Coldset'' or ''non-heatset'' means a printing process in which the ink dries on the substrate through ordinary evaporation and absorption;

(D) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(E) ''Fountain solution'' means, with respect to offset lithographic printing, a water-based solution that contains small amounts of gum Arabic or synthetic resins, acids, buffer salts and a wetting agent or dampening aid applied to the image plate to reduce the surface tension of the solution;

(F) ''Heatset'' means a printing process in which ink is set by the evaporation of ink solvents or oils in a hot air dryer;

(G) ''Letterpress printing'' means a printing process in which the image area is raised relative to the non-image area, and the paste ink is transferred to the substrate directly from the image surface;

(H) ''Lithographic printing'' means a printing process in which the image and non-image areas are chemically differentiated, *i.e.*, the image area is oil receptive and the non-image area is water receptive;

(I) ''Offset lithographic printing'' means a type of lithographic printing in which an ink film is applied to a lithographic plate and then transferred to an intermediary surface or blanket, and the image on the blanket is then transferred to a substrate, typically paper or paperboard;

(J) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency;

(K) ''Press'' means a printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application or infrared heating units;

(L) ''Sheet-fed printing'' means, with respect to offset lithographic printing, a process in which individual sheets of paper or other substrate are fed to the press;

(M) ''VOC composite partial vapor pressure'' means the sum of the partial pressure of the compounds defined as VOCs;

(N) ''Web printing'' means, with respect to offset lithographic printing, a process where continuous rolls of substrate material are fed to the press and rewound or cut to size after printing; and

(O) ''As-applied VOC content'' means the VOC content of cleaning solvent, fountain solution or solvent-based ink at the time of application to a substrate, including any solvent, catalyst or other substance added to the as-supplied cleaning solvent, fountain solution or solvent-based ink. ''As-applied VOC content'' is determined using an EPA reference method, a California Air Resources Board reference method or other method approved by the commissioner.

(2) Applicability. The provisions of this subsection apply to the owner or operator of any offset lithographic or letterpress printing press who purchases for the printing operation at least 855 gallons of cleaning solvents, fountain solution additives and solvent-based inks in aggregate per any rolling 12-month period. Any owner or operator of an offset lithographic or a letterpress printing press shall:

(A) Comply with the requirements of this subsection no later than January 1, 2011; and

(B) Remain subject to this subsection.

(3) Fountain solutions.

(A) The owner or operator of a heatset web offset lithographic printing press with a fountain solution reservoir of at least one gallon in capacity shall:

(i) Limit the as-applied VOC content of the fountain solution to 1.6% by weight or less,

(ii) If the fountain solution is refrigerated to below 60°F, limit the as-applied VOC content of the fountain solution to 3% by weight or less, or

(iii) Use fountain solution that contains no alcohol and limit the alcohol substitute content of the fountain solution to 5% by weight or less.

(B) The owner of a sheet-fed offset lithographic printing press with a minimum sheet size of greater than 11x17 inches and a fountain solution reservoir greater than one gallon in capacity shall:

(i) Limit the as-applied VOC content of the fountain solution to 5% by weight or less,

(ii) If the fountain solution is refrigerated to below 60°F, limit the as-applied VOC content of the fountain solution to 8.5% or less, or

(iii) Use fountain solution that contains no alcohol and limit the alcohol substitute content of the fountain solution to 5% by weight or less.

(C) The owner of a coldset web offset lithographic printing press with a fountain solution reservoir of at least one gallon in capacity shall use a fountain solution that contains no alcohol and that has an alcohol substitute content of 5% by weight or less.

(4) Heatset web offset lithographic printing or heatset letterpress printing. Except heatset presses for book printing or heatset presses with a web width of 22 inches or less, the owner or operator of a heatset web offset lithographic or heatset letterpress printing press with the potential to emit at least 25 tons per year of VOC emissions from all dryers, prior to controls, shall operate air pollution control equipment to:

(A) Achieve a 90% overall control efficiency if the air pollution control equipment is installed prior to January 1, 2011;

(B) Achieve a 95% overall control efficiency if the air pollution control equipment is installed on or after January 1, 2011; or

(C) Reduce the control device outlet concentration to 20 parts per million as hexane on a dry basis if the inlet VOC concentration is so low that the control efficiency specified in subparagraph (A) or (B) of this subdivision cannot be achieved.

(5) Cleaning solvents. The owner or operator of an offset lithographic printing press or letterpress printing press:

(A) Shall use cleaning solvents that:

(i) Have composite vapor pressure less than 10 mmHg at 20°C, or

(ii) Have a VOC content less than 70% by weight.

(B) May in any twelve-month period use no more than 110 gallons of cleaning solvent that does not comply with subparagraph (A) of this subdivision.

(6) Work practices. Each owner or operator shall use the following work practices:

(A) New and used VOC-containing ink, fountain solution and cleaning solvent, including solvents mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of VOC-containing ink, fountain solution and cleaning solvent shall be minimized. Any leaked or spilled VOC-containing ink, fountain solution or cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper, which are moistened with VOC-containing ink, fountain solution or cleaning solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and

(D) VOC-containing ink, fountain solution and cleaning solvents shall be conveyed from one location to another in a closed container or pipe.

(7) Records.

(A) An owner or operator of any offset lithographic or letterpress printing press shall maintain records of the information described in subparagraph (B) of this subdivision. Such records shall be:

(i) Made available to the commissioner to inspect and copy upon request, and

(ii) Maintained for five years from the date such record is created.

(B) An owner or operator of an offset lithographic or a letterpress printing press shall maintain daily records of all cleaning solvents, fountain solution additives or solvent-based inks used, as follows:

(i) Name and description of each cleaning solvent, fountain solution additive or solvent-based ink,

(ii) VOC content of each cleaning solvent, fountain solution additive or solvent-based ink, as-applied, and the associated calculations,

(iii) VOC content of each cleaning solvent, fountain solution additive or solvent-based ink, as supplied,

(iv) The amount of each cleaning solvent, fountain solution additive or solvent-based ink,

(v) A Material Safety Data Sheet for each cleaning solvent, fountain solution additive or solvent-based ink,

(vi) Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the commissioner, and

(vii) Date and type of maintenance performed on air pollution control equipment, if applicable.

(C) Any owner or operator of any offset lithographic or letterpress printing press who is not otherwise subject to the provisions of this subsection shall maintain

material purchase records to verify that the provisions of this subsection do not apply to such owner or operator.

(hh) **Large appliance coatings.**

(1) Definitions. For the purpose of this subsection:

(A) ''Air dried'' means cured at a temperature below 90°C (194°F);

(B) ''As-applied'' means the composition of coating at the time it is applied to a surface, including any solvent, catalyst or other substance added to the coating as supplied by the manufacturer;

(C) ''Baked'' means cured at a temperature at or above 90°C (194°F);

(D) ''Capture efficiency'' means the ratio of VOC emissions delivered to control device to the total VOC emissions resulting from large appliance coating and related cleaning, expressed as a percentage;

(E) ''Cleaning solvent'' means any VOC-containing liquid used in cleaning a large appliance coating operation;

(F) ''Coating'' means a material that is applied to a surface and that forms a continuous film in order to beautify or protect such surface;

(G) ''Coating unit'' means a series of one or more coating applicators and any associated drying area or oven wherein a coating is applied, dried or cured, including any drying area or oven where a coating is applied, dried or cured prior to any subsequent application of a different coating. A ''coating unit'' does not include any point other than the point where the coating is dried or cured;

(H) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(I) ''Dip coating'' means a method of applying a coating to a surface by submersion into and removal from a coating bath;

(J) ''Electrostatic application'' means a method of applying coating particles or coating droplets to a grounded surface by electrically charging such particles or droplets;

(K) ''Extreme high gloss coating'' means a coating that, when tested by the most recent active version of the American Society for Testing Material Test Method D523, shows a reflectance of 75 or more on a 60 degree meter;

(L) ''Extreme performance coating'' means a coating used on a metal surface where the coated surface is, in its intended use, subject to one of the following conditions:

(i) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution,

(ii) Repeated exposure to temperatures in excess of 121.1°C (250°F), or

(iii) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleaners or scouring agents;

(M) ''Flow coating'' means a non-atomized technique of applying coating to a substrate using a fluid nozzle in a fan pattern with no air supplied to the nozzle;

(N) ''Heat-resistant coating'' means a coating that must withstand a temperature of at least 400°F during normal use;

(O) ''HVLP spray application'' means to apply a coating using a high-volume, low-pressure application system that is designed to operate at air pressures between 0.1 and 10 pounds per square inch gauge, measured dynamically at the center of the air cap and the air horns;

(P) ''Large appliance coating'' means the application of a coating to a large appliance part or product during manufacture;

(Q) ''Large appliance part'' means any surface-coated metal lid, door, casing, panel or other interior or exterior metal part or accessory that is assembled to form a large appliance product;

(R) ''Large appliance product'' means any surface-coated large appliance including, but not limited to, a metal range, oven, microwave oven, refrigerator, freezer, washer, dryer, dishwasher, water heater or trash compactor manufactured for household, commercial or recreational use;

(S) ''Metallic coating'' means a coating that contains more than five grams of metal particle per liter of coating, as-applied;

(T) ''Multi-component coating'' means a coating requiring the addition of a separate reactive resin, such as a catalyst or hardener, before application to form an acceptable dry film;

(U) ''One-component coating'' means a coating that is ready for application as packaged for sale, except for the addition of a thinner to reduce the viscosity;

(V) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency;

(W) ''Pretreatment coating'' means a coating, containing no more than 12% solids by weight and at least one-half percent acid by weight, applied directly to metal surfaces to provide surface etching, adhesion and ease when stripping;

(X) ''Repair coating'' means a coating used to recoat portions of a product that has sustained mechanical damage to the coating following normal painting operations;

(Y) ''Roll coating'' means a coating method using a machine that applies coating to a substrate by continuously transferring coating through a set of oppositely rotating rollers;

(Z) ''Stencil coating'' means an ink or a coating that is rolled or brushed onto a template or stamp to add identifying letters or numbers to metal parts or products;

(AA) ''Solar-absorbent coating'' means a coating which has, as its primary purpose, the absorption of solar radiation;

(BB) ''Touch-up coating'' means a coating used to cover minor coating imperfections appearing after the main coating operation; and

(CC) ''As-applied VOC content'' means the VOC content of cleaning solvent or coating at the time of application to a substrate, including any solvent, catalyst or other substance added to the as-supplied cleaning solvent or coating. ''As-applied VOC content'' is determined using an EPA reference method, a California Air Resources Board reference method or other method approved by the commissioner.

(2) Applicability. Except as provided in subdivision (3) of this subsection, the provisions of this subsection apply to an owner or operator of any large appliance coating unit who purchases for the coating operation at least 855 gallons of coatings and cleaning solvents in aggregate per any rolling 12-month period. Any such owner or operator shall:

(A) Comply with the requirements of this subsection no later than January 1, 2011; and

(B) Remain subject to this subsection.

(3) Exemptions and exceptions.

(A) The requirements of subdivision (5) of this subsection shall not apply to the following:

(i) Stencil coating,

(ii) Safety-indicating coating, as defined in subdivision (1) of subsection (p) of this section,

(iii) Solid-film lubricant, as defined in subdivision (1) of subsection (p) of this section,

(iv) Electric-insulating and thermal-conducting coating, as defined in subdivision (1) of subsection (p) of this section,

(v) Touch-up coating,

(vi) Repair coating, or

(vii) Coating applied with a hand-held aerosol can.

(B) The requirements of subdivision (4) of this subsection shall not apply to a person using air pollution control equipment, as specified in subdivision (5)(B) of this subsection, to comply with the requirements of this subsection.

(4) Application methods. A person shall not apply a VOC-containing coating to any large appliance part or product unless the coating is applied by one of the following methods using equipment operated in accordance with the specifications of the equipment manufacturer:

(A) Electrostatic application;

(B) Flow coating;

(C) Dip coating;

(D) Roll coating;

(E) HVLP spray application;

(F) Hand application; or

(G) Any other coating application method capable of achieving a transfer efficiency equivalent to or better than that provided by HVLP spray application. Any owner or operator using an application method pursuant to this subparagraph shall maintain records demonstrating the transfer efficiency achieved.

(5) Compliance options. Except as provided in subdivision (3) of this subsection, on and after January 2011, no owner or operator conducting large appliance coating shall apply any coating, inclusive of any VOC-containing materials added to the original coating supplied by the manufacturer, unless the owner or operator uses one of the following methods to control emissions of VOCs:

(A) Use only coatings with an as-applied VOC content no greater than the levels specified in Table 20(hh)-1, according to coating category and drying method, where:

(i) The VOC content limits of Table 20(hh)-1 apply to the volume of coating as-applied, less water and less exempt VOC, and

(ii) The VOC content limits of Table 20(hh)-1 may be met by averaging the VOC content of materials used on a single large appliance coating unit per a single day;

(B) Install, operate and maintain in accordance with the manufacturer's recommendations, a capture and a control device that produce an overall control efficiency of 90%; or

(C) With the approval of the commissioner and the EPA Administrator, use an alternative means to achieve a level of control equivalent to that required in subparagraph (A) or (B) of this subdivision. An owner or operator shall submit a request to the commissioner and the EPA Administrator to use an alternative means of compliance, and such request shall include:

(i) A description of the method,

(ii) A demonstration of the level of emissions control achieved, and

(iii) Any other information requested by the commissioner or the EPA Administrator.

(6) Work practices. Each owner or operator shall use the following work practices:

(A) New and used VOC-containing coating or cleaning solvent, including a coating mixed on the premises, shall be stored in a nonabsorbent, non-leaking

container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of VOC-containing coating or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating or cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper, which are moistened with a VOC-containing coating or cleaning solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and

(D) VOC-containing coating and cleaning solvent shall be conveyed from one location to another in a closed container or pipe.

Table 20(hh)-1. As-Applied VOC Content Limits Per Volume of Coating (Excluding Water and Exempt VOCs) per Coating Category, Specific to the Drying Process

Coating Category	Baked		Air Dried	
	g/L	lb/gal	g/L	lb/gal
General, one component	275	2.3	275	2.3
General, multi-component	275	2.3	340	2.8
Extreme high gloss	360	3.0	340	2.8
Extreme performance	360	3.0	420	3.5
Heat-resistant	360	3.0	420	3.5
Metallic	420	3.5	420	3.5
Pretreatment	420	3.5	420	3.5
Solar-absorbent	360	3.0	420	3.5

(7) Records.

(A) An owner or operator of any large appliance coating unit shall maintain records of the information described in subparagraph (B) of this subdivision. Such records shall be:

(i) Made available to the commissioner to inspect and copy upon request, and

(ii) Maintained for five years from the date such record is created.

(B) An owner or operator of a large appliance coating unit shall maintain daily records of all coatings and cleaning solvents used, as follows:

(i) Name and description of each coating or cleaning solvent,

(ii) VOC content of each coating or cleaning solvent, as-applied, and the associated calculations,

(iii) VOC content of each coating or cleaning solvent, as supplied,

(iv) The amount of each coating or cleaning solvent,

(v) A Material Safety Data Sheet for each coating or cleaning solvent,

(vi) Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the commissioner, and

(vii) Date and type of maintenance performed on air pollution control equipment, if applicable.

(C) Any owner or operator of any large appliance coating unit who is not otherwise subject to the provisions of this subsection shall maintain material purchase records to verify that the provisions of this subsection do not apply to such owner or operator.

(ii) **Industrial solvent cleaning.**

(1) Definitions. For the purpose of this subsection:

(A) ''Capture efficiency'' means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from industrial solvent cleaning, expressed as a percentage;

(B) ''Cleaning solvent'' means any VOC-containing liquid, including a liquid impregnated wipe or towelette, used in cleaning;

(C) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(D) ''Industrial solvent cleaning'' means the use of cleaning solvent to remove uncured adhesives, uncured inks, uncured coatings or contaminants such as dirt, soil or grease from parts, products, tools, machinery, equipment or work areas, where such parts, products, tools, machinery, equipment and work areas are incorporated into or used exclusively in manufacturing a product. ''Industrial solvent cleaning'' includes spray booth cleaning, cleaning of manufactured components, parts cleaning, cleaning of production equipment for maintenance or to prohibit cross-contamination, and cleaning of tanks, mixing pots, process vessels and lines. ''Industrial solvent cleaning'' does not include the cleaning of personal protection equipment, such as respirators.

(E) ''Janitorial cleaning'' means general and maintenance cleaning of building or facility components including, but not limited to, floors, ceilings, walls, windows, doors, stairs, restrooms, furnishings, kitchens and exterior surfaces of office equipment. ''Janitorial cleaning'' includes graffiti removal. ''Janitorial cleaning'' does not include the cleaning of parts, products or equipment, where such parts, products or equipment are incorporated into or used exclusively in manufacturing a product. ''Janitorial cleaning'' excludes the cleaning of work areas, such as laboratory benches, where manufacturing or repair activity is performed;

(F) ''Medical device'' means an instrument, apparatus, implement, machine, gadget, appliance, implant, *in vitro* reagent or other similar or related article, including any component, part or accessory, which meets one of the following conditions:

(i) Recognized in the official National Formulary or the United States Pharmacopeia or any supplement thereto,

(ii) Intended for use in the diagnosis of disease or other conditions or in the cure, mitigation, treatment or prevention of disease, in persons or animals, or

(iii) Intended to affect the structure or function of the body of a person or animal, and which does not achieve its primary intended purposes through chemical action within or on such body and which is not dependent upon being metabolized for the achievement of its primary intended purposes;

(G) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency;

(H) ''Screen printing'' means a method of creating an image by pressing ink through a screen or fabric to which a stencil has been applied and where the stencil openings determine the form and dimensions of the image; and

(I) ''As-applied VOC content'' means the VOC content of a cleaning solvent at the time of use, including any solvent, catalyst or other substance added to the as-supplied cleaning solvent. ''As-applied VOC content'' is determined using an EPA reference method, a California Air Resources Board reference method or other method approved by the commissioner.

(2) Applicability. Except as provided in subdivision (3) of this subsection, the provisions of this subsection apply to an owner or operator of any premises who

purchases for use at the premises at least 855 gallons of cleaning solvents in aggregate per rolling 12-month period. Any owner or operator of such a premises shall:

(A) Comply with the requirements of this subsection no later than January 1, 2011; and

(B) Remain subject to this subsection.

(3) Exemptions and exceptions.

(A) The requirements of this subsection shall not apply to the use of cleaning solvent as follows:

(i) In janitorial cleaning,

(ii) At an aerospace manufacturing and rework operation or a wood furniture coating operation in accordance with an order or a permit issued pursuant to sections 22a-174-32(e) and 22a-174-20(cc) of the Regulations of Connecticut State Agencies,

(iii) To perform general solvent cleaning in accordance with an order issued pursuant to section 22a-174-20(ee) of the Regulations of the Connecticut State Agencies,

(iv) At any aerospace manufacturing and rework facility, provided that cleaning solvent is used in accordance with the requirements of 40 CFR 63.744, inclusive of exemptions,

(v) As surface preparation or cleanup solvent in accordance with section 22a-174-44 of the Regulations of Connecticut State Agencies,

(vi) Where the cleaning solvent is regulated pursuant to section 22a-174-40 of the Regulations of Connecticut State Agencies,

(vii) To perform industrial solvent cleaning where such cleaning or cleaning solvent is subject to one of the following subsections of this section: (*l*) through (y), (ff) through (hh), or (jj),

(viii) In cleaning, including surface preparation prior to coating, necessary to meet a standard or specification issued or approved by the United States Department of Defense, Federal Aviation Administration or other federal government entity. Any person claiming exemption pursuant to this clause shall maintain records of the standard or specification,

(ix) Associated with research and development,

(x) Associated with quality control or laboratory testing,

(xi) Associated with medical device manufacturing,

(xii) Associated with pharmaceutical manufacturing,

(xiii) That exceeds the applicable limit of subdivision (4)(A) of this subsection where the quantity used does not exceed 55 gallons per any twelve-month rolling aggregate. Any person claiming exemption pursuant to this clause shall record and maintain monthly records sufficient to demonstrate compliance with this exemption, or

(xiv) That exceeds the applicable limit of subdivision (4)(A) of this subsection, if approved by the commissioner and the EPA Administrator. Any request for approval shall be made in writing to the commissioner and EPA Administrator and shall include a description of the cleaning solvent and its VOC content, an explanation of why the cleaning solvent is necessary, quantification of the amount of the VOC that will be emitted as a result of the use of the noncompliant cleaning solvent and the time period over which the noncompliant solvent will be used.

(B) The requirements of subdivisions (4) and (6) of this subsection shall not apply to the use of cleaning solvent in a digital printing operation, where digital printing means a method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a substrate.

(C) The limitations of subdivision (4)(A) of this subsection shall not apply to cleaning solvent used to clean screen printing equipment, if the cleaning solvent used has an as-applied VOC content that does not exceed 500 grams per liter (4.2 pounds per gallon).

(4) Control of emissions. Except as provided in subdivision (3) of this subsection, any owner or operator performing industrial solvent cleaning shall use one of the following methods to limit VOC emissions:

(A) Use only cleaning solvent that complies with one of the following limitations:

(i) As-applied, has a VOC content that does not exceed 50 grams per liter (0.42 lb/gal), or

(ii) As-applied, has a vapor pressure no greater than 8 mm Hg at 20°C; or

(B) Install, operate and maintain in accordance with the manufacturer's recommendations, air pollution control equipment that reduces uncontrolled VOC emissions to the atmosphere from any industrial solvent cleaning by an overall control efficiency of at least 85%.

(5) Work practices. Each owner or operator shall use the following work practices:

(A) New and used cleaning solvent, including those mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of cleaning solvent shall be minimized. Any leaked or spilled cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper, which are moistened with cleaning solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and

(D) Cleaning solvent shall be conveyed from one location to another in a closed container or pipe.

(6) Records.

(A) An owner or operator conducting industrial solvent cleaning shall maintain records of the information described in subparagraph (B) of this subdivision. Such records shall be:

(i) Made available to the commissioner to inspect and copy upon request, and

(ii) Maintained for five years from the date such record is created.

(B) An owner or operator conducting industrial solvent cleaning shall maintain daily records of all cleaning solvents used, as follows:

(i) Name and description of each cleaning solvent,

(ii) VOC content of each cleaning solvent, as-applied, and the associated calculations,

(iii) VOC content of each cleaning solvent, as supplied,

(iv) The amount of each cleaning solvent,

(v) A Material Safety Data Sheet for each cleaning solvent,

(vi) Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the commissioner, and

(vii) Date and type of maintenance performed on air pollution control equipment, if applicable.

(C) Any owner or operator conducting industrial solvent cleaning who is not otherwise subject to the provisions of this subsection shall maintain materials purchase records to verify that the provisions of this subsection do not apply to such owner or operator.

(D) An owner or operator conducting industrial solvent cleaning subject to an exemption or exception in subdivision (3) of this subsection shall maintain records sufficient to verify the applicability of the exemption or exception.

(jj) **Spray application equipment cleaning.**

(1) Definitions. For the purpose of this subsection:

(A) ''Capture efficiency'' means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from spray application equipment cleaning, expressed as a percentage;

(B) ''Cleaning solvent'' means any VOC-containing liquid used to clean spray application equipment;

(C) ''Control device efficiency'' means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage;

(D) ''Enclosed gun cleaner'' means a device, used for cleaning spray application equipment, which has an enclosed cleaning solvent container and either:

(i) Is not open to the ambient air when in use and has a mechanism to force the cleaning solvent through the spray application equipment while the cleaner is in operation, or

(ii) Uses non-atomized solvent flow to flush the spray application equipment and collects and returns the discharged cleaning solvent to the enclosed container;

(E) ''Medical device'' means an instrument, apparatus, implement, machine, gadget, appliance, implant, *in vitro* reagent or other similar or related article, including any component, part or accessory, which meets one of the following conditions:

(i) Recognized in the official National Formulary or the United States Pharmacopeia or any supplement thereto,

(ii) Intended for use in the diagnosis of disease or other conditions or in the cure, mitigation, treatment or prevention of disease, in persons or animals, or

(iii) Intended to affect the structure or function of the body of a person or animal, and which does not achieve its primary intended purposes through chemical action within or on such body and which is not dependent upon being metabolized for the achievement of its primary intended purposes;

(F) ''Overall control efficiency'' means the product of the capture efficiency and the control device efficiency; and

(G) ''Spray application equipment'' means a hand-held device that creates an atomized mist of coating, or other liquid substance, and deposits the coating, or other liquid substance, on a substrate.

(H) ''As-applied VOC content'' means the VOC content of a cleaning solvent at the time of use, including any solvent, catalyst or other substance added to the as-supplied cleaning solvent. ''As-applied VOC content'' is determined using an EPA reference method, a California Air Resources Board reference method or other method approved by the commissioner.

(2) Applicability. Except as provided in subdivision (3) of this subsection, on and after January 1, 2011, the provisions of this subsection apply to an owner or operator of any spray application equipment.

(3) Exemptions and exceptions.

(A) The requirements of this subsection shall not apply to cleaning of spray application equipment as follows:

(i) Associated with automotive refinishing and conducted pursuant to section 22a-174-3b(d) of the Regulations of Connecticut State Agencies,

(ii) Pursuant to section 22a-174-44(d) of the Regulations of Connecticut State Agencies,

(iii) At any aerospace manufacturing and rework facility, provided that cleaning solvent is used in accordance with the requirements of 40 CFR 63.744, inclusive of exemptions,

(iv) Necessary to meet a standard or specification of the United States Department of Defense,

(v) Associated with research and development, quality control or laboratory testing, or

(vi) Associated with medical device manufacturing;

(B) The cleaning solvent VOC content limit of subparagraphs (B) through (D) of subdivision (4) of this subsection shall not apply to the cleaning of spray application equipment used in the assembly, repair and manufacture of submarines;

(C) Using cleaning solvent that exceeds the VOC content limitation of subparagraph (B), (C) or (D) of subdivision (4) of this subsection where the quantity of cleaning solvent used does not exceed 55 gallons in aggregate per any 12-month rolling period. Any person claiming exemption pursuant to this subparagraph shall record and maintain monthly records sufficient to demonstrate compliance with this exemption; and

(D) The cleaning solvent VOC content limitations of subparagraph (B), (C) or (D) of subdivision (4) of this subsection shall not apply, upon request to and approval by the commissioner. Any request for approval shall be made in writing to the commissioner and shall include a description of the noncompliant solvent and its VOC content, an explanation of why the noncompliant solvent is necessary, the aggregate amount in gallons or pounds of noncompliant solvent use anticipated in a 12-month period and the frequency of use of the noncompliant solvent.

(4) Control of emissions. An owner or operator shall clean spray application equipment in accordance with the requirements of one of the following subparagraphs:

(A) Using an enclosed gun cleaner that is maintained and operated in accordance with the manufacturer's recommendations and the following practices:

(i) Operate using an automated cycle, if applicable,

(ii) Inspect hoses regularly for leaks,

(iii) If a leak is discovered, repair as soon as practicable but no later than 15 days after discovery, and

(iv) Ensure the cover is properly closed;

(B) Using only cleaning solvent with an as-applied VOC content that does not exceed 50 grams per liter (0.417 lb/gal) by placing cleaning solvent in the pressure pot and forcing the solvent through the gun with the atomizing cap in place, without the use of atomizing air. Used cleaning solvent shall be directed into a vat, drum or other waste container that is closed when not in use;

(C) Using only cleaning solvent with an as-applied VOC content that does not exceed 50 grams per liter (0.417 lb/gal) by disassembling the spray gun and cleaning the components and associated hoses and pumps by hand in a vat, which shall remain closed at all times except when in use. Components and associated hoses and pumps may be soaked in a vat with a capacity no greater than 20 liters. Such a soaking vat shall remain closed during the soaking period, except when inserting or removing items;

(D) Using only cleaning solvent with an as-applied VOC content that does not exceed 50 grams per liter (0.417 lb/gal) by forcing cleaning solvent through the

spray gun and directing the atomized solvent spray into a waste container that is fitted with a device to capture the resulting emissions; or

(E) Installing, operating and maintaining air pollution control equipment that reduces uncontrolled VOC emissions to the atmosphere from any spray application equipment cleaning by an overall control efficiency of at least 85%.

(5) Work practices. Each owner or operator shall use the following work practices:

(A) New and used cleaning solvent, including those mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;

(B) Spills and leaks of cleaning solvent shall be minimized. Any leaked or spilled cleaning solvent shall be absorbed and removed immediately;

(C) Absorbent applicators, such as cloth and paper that are moistened with cleaning solvent shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling;

(D) Cleaning solvent shall be conveyed from one location to another in a closed container or pipe; and

(E) Air pollution control equipment shall be operated and maintained in accordance with the manufacturer's recommendations.

(6) Records.

(A) An owner or operator conducting spray application equipment cleaning shall maintain records of the information described in subparagraph (B) of this subdivision. Such records shall be:

(i) Made available to the commissioner to inspect and copy upon request, and

(ii) Maintained for five years from the date such record is created.

(B) An owner or operator conducting spray application equipment cleaning shall maintain daily records of all cleaning solvents used, as follows:

(i) Name and description of each cleaning solvent,

(ii) VOC content of each cleaning solvent, as-applied, and the associated calculations,

(iii) VOC content of each cleaning solvent, as supplied,

(iv) The amount of each cleaning solvent,

(v) A Material Safety Data Sheet for each cleaning solvent,

(vi) A description of the type of cleaning equipment and process,

(vii) Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the commissioner, and

(viii) Date and type of maintenance performed on air pollution control equipment, if applicable.

(C) An owner or operator that is conducting spray application equipment cleaning subject to an exemption or exception in subdivision (3) of this subsection shall maintain records sufficient to verify the applicability of the exemption or exception.(Effective August 23, 1996, amended April 1, 1998, April 4, 2006, July 26, 2007, January 1. 2009, April 6, 2010)

Sec. 22a-174-21. Control of carbon monoxide emissions

(a) No person shall cause or permit the emission of carbon monoxide waste gas generated during the operation of a grey iron cupola, blast furnace or basic oxygen steel furnace unless the waste gas is incinerated in a direct flame after-burner, boiler, or equivalent device at a temperature of 1300°F for a period of not less than three-tenths of a second.

(b) No person shall cause or permit the emission of carbon monoxide waste gas from any catalyst regeneration of a petroleum cracking system, petroleum fluid coker, or other petroleum process into the atmosphere unless the waste gas is incinerated in a direct flame afterburner, boiler, or equivalent device at a temperature of 1300°F for a period of not less than three-tenths of a second.

(Effective August 1, 1983)

Sec. 22a-174-22. Control of nitrogen oxides emissions

(a) **Definitions**

For purposes of this section, the following definitions shall apply:

(1) ''Contract'' means: (A) an agreement between a utility and a customer (or other person) to provide electricity; or (B) a change in any agreement between a utility and a customer (or other person) to provide electricity.

(2) ''Electricity supplier'' means ''electric supplier'' as defined in section 16-1(a)(30) of the Connecticut General Statutes, and ''municipal electric utility'' as defined in section 7-233b(8) of the Connecticut General Statutes.

(3) ''Emergency engine'' means a stationary reciprocating engine or a turbine engine which is used as a means of providing mechanical or electrical power only during periods of testing and scheduled maintenance or during either an emergency or in accordance with a contract intended to ensure an adequate supply of electricity for use within the state of Connecticut during the loss of electrical power derived from nuclear facilities. The term does not include an engine for which the owner or operator of such engine is party to any other agreement to sell electrical power from such engine to an electricity supplier, or otherwise receives any reduction in the cost of electrical power for agreeing to produce power during periods of reduced voltage or reduced power availability.

(4) ''Emergency'' means an unforeseeable condition that is beyond the control of the owner or operator of an emergency engine and that:

(A) Results in an interruption of electrical power from the electricity supplier to the premises;

(B) Results in a deviation of voltage from the electricity supplier to the premises of three percent (3%) above or five percent (5%) below standard voltage in accordance with subsection (a) of section 16-11-115 of the Regulations of Connecticut State Agencies;

(C) Requires an interruption of electrical power from the electricity supplier to the premises enabling the owner or operator to perform emergency repairs;

(D) Requires operation of the emergency engine to minimize damage from fire, flood, or any other catastrophic event, natural or man-made; or

(E) Notwithstanding section 22a-174-22(a)(3) of the Regulations of Connecticut State Agencies, requires operation of the emergency engine under an agreement with the New England Region System Operator during the period of time the New England Region System Operator is implementing voltage reductions or involuntary load interruptions within the Connecticut load zone due to a capacity deficiency.

(5) ''Gas'' or ''gaseous fuel'' means natural gas, propane, or any other fuel that is in the gaseous state under standard conditions.

(6) ''gm/bk hp-hr'' means grams per brake horsepower-hour.

(7) ''lb'' means pound.

(8) ''MMBTU'' means million BTU of heat input.

(9) ''MMBTU/hr'' means million BTU of heat input per hour.

(10) ''MRC'' means maximum rated capacity.

(11) ''Major stationary source of NOx'' means premises with potential emissions of NOx equal to or greater than fifty (50) tons per year in a serious nonattainment area for ozone, or twenty-five (25) tons per year in a severe nonattainment area for ozone.

(12) ''NOx budget program source'' means:

(A) A fossil-fuel-fired stationary source that serves a generator with a nameplate capacity of fifteen megawatts (15 MW) or more; or

(B) A fossil-fuel-fired boiler or indirect heat exchanger with a maximum heat input capacity of 250 MMBTU or more.

(13) ''NOx discrete emission reduction credit'' or ''NOx DERC'' means the reduction of one ton of NOx at a source during a discrete period of time, which the commissioner has certified as real, quantifiable, surplus, permanent, and enforceable.

(14) ''Other boiler'' means a boiler that is not a cyclone furnace, fast-response double-furnace naval boiler, or fluidized-bed combustor.

(15) ''Other oil'' means a fuel that is liquid at standard conditions and is not residual oil.

(16) ''ppmvd'' means parts per million by volume on a dry basis.

(17) ''Premises'' means ''premises'' as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(18) ''Reciprocating engine'' means a stationary internal combustion engine having a crankshaft turned by linearly reciprocating pistons.

(19) ''Selective noncatalytic reduction'' means emission control technology that involves the injection of a chemical reagent at high flue gas temperatures to selectively reduce NOx emissions to nitrogen and water.

(20) ''Turbine engine'' means a stationary internal combustion engine that continuously converts an air-fuel mixture into rotational mechanical energy through the use of moving vanes attached to a rotor.

(21) ''Waste combustor'' means an incinerator as defined in subsection 22a-174-18(a) of the Regulations of Connecticut State Agencies, a resources recovery facility as defined in section 22a-207 of the Connecticut General Statutes, or a sewage sludge incinerator. The term does not include a flare or an industrial fume incinerator.

(b) **Applicability**

(1) This section applies to the owner or operator of:

(A) Any of the following sources, provided such sources are located at a major stationary source of NOx:

(i) A reciprocating engine with a maximum rated capacity of three (3) MMBTU/hr or more;

(ii) Fuel-burning equipment, other than a reciprocating engine, with a maximum rated capacity of five (5) MMBTU/hr or more;

(iii) Equipment that combusts fuel for heating materials and that has a maximum rated capacity of five (5) MMBTU/hr or more;

(iv) A waste combustor with a design capacity of two thousand (2000) pounds or more of waste per hour; or

(B) Fuel-burning equipment, a waste combustor, or a process source that has potential emissions of NOx in excess of the following:

(i) One hundred thirty-seven (137) pounds during any day from May 1 to September 30, inclusive, of any year, if such source is located in a severe nonattainment area for ozone; or

(ii) Two hundred seventy-four (274) pounds during any day from May 1 to September 30, inclusive, of any year, if such source is located in a serious nonattainment area for ozone.

(2) Subsections (d) to (k), inclusive, of this section shall not apply to the owner or operator of a source if the actual emissions of NOx since January 1, 1990 from the premises at which such source is located have not exceeded twenty-five (25) tons in any calendar year if such premises are located in a severe nonattainment area for ozone, or fifty (50) tons in any calendar year if such premises are located in a serious nonattainment area for ozone. Notwithstanding this provision, subsection (d) to subsection (k), inclusive, of this section shall apply to such owner or operator if after May 31, 1995, actual emissions of NOx from such premises exceed the following:

(A) In any calendar year: twenty-five (25) tons for premises located in a severe nonattainment area for ozone, or fifty (50) tons for premises located in a serious nonattainment area for ozone; or

(B) On any day from May 1 to September 30, inclusive, of any year: one hundred thirty-seven (137) pounds for premises located in a severe nonattainment area for ozone or two hundred seventy-four (274) pounds for premises located in a serious nonattainment area for ozone.

(3) Subsections (d) through (k) of this section shall not apply to the owner or operator of an emergency engine. In addition, the actual emissions from emergency engines operating during an emergency shall not be included in the determination of the applicability of subsection (b)(2)(B) of this section.

(4) The owner or operator of an emergency engine shall not include the actual emissions from any such engine for purposes of determining applicability in accordance with subsection (b)(2)(B) of this subsection, provided such emissions result from operation in accordance with a contract with a utility operating pursuant to a permit or order which:

(A) Requires the permittee to maintain a list which identifies all sources with whom the permittee has a contract;

(B) Requires either the permitee or the owner or operator of the emergency engine to record and submit to the Commissioner data on fuel consumption and hours of operation of any emergency engine operating under such contract; and

(C) Requires the permittee to obtain NOx emission reductions to offset the NOx emissions that result from the generation of customer-contracted electricity.

(5) Notwithstanding subdivision (3) of this subsection, subsections (d) through (k) of this section shall apply to the owner or operator of an emergency engine if, after May 1, 1997, such engine operates for routine, scheduled testing or maintenance on any day for which the Commissioner has forecast that ozone levels will be ''moderate to unhealthful,'' ''unhealthful,'' or ''very unhealthful.'' The Commissioner may exempt, by permit or order, the owner or operator of an emergency engine from this subdivision, if such emergency engine is unattended, the testing is automated and cannot be modified from a remote location.

(c) **Exemption.**

This section shall not apply to the owner or operator of a mobile source.

(d) **General requirements.**

(1) On and after May 31, 1995, the owner or operator of a stationary source subject to this section shall:

(A) comply with all applicable emission limitations for such source in subsection (e) of this section;

(B) comply with the provisions for multi-fuel sources in subsection (f) of this section;

(C) reduce the NOx emission rate from such source by forty percent (40%), pursuant to subsection (g) of this section, in accordance with a permit issued by the Commissioner;

(D) file a permit application to modify the schedule of operations at such source, pursuant to subsection (i) of this section, in accordance with a permit issued by the Commissioner.

(2) On October 1, 2003, and during the period from October 1 to April 30, inclusive, each year thereafter, the owner or operator of a stationary source subject to this section that is also a NOx budget program source shall:

(A) Comply with the emission limitation in subsection (e)(3) of this section; or

(B) Use NOx DERCs, or NOx allowances, or both, pursuant to subsection (j) of this section, to achieve all or a portion of the NOx emission reductions required by the emission limitation in subsection (e)(3) of this section.

(3) The owner or operator of a stationary source subject to this section, in accordance with an order or permit issued by the Commissioner, may use NOx DERCs and NOx allowances, pursuant to subsection (j) of this section, to achieve all or a portion of the reductions required by this section. The Commissioner shall submit such permit or order to the Administrator for approval in accordance with the provision of 42 U.S.C. 7401-7671q.

(4) Nothing herein shall preclude the Commissioner from issuing an order to an owner or operator of a stationary source subject to this section to comply with the requirements of this subsection.

(e) **Emission limitations**.

(1) The owner or operator of a stationary source subject to this section may, in accordance with subsection (d)(1)(A) of this section, comply with the requirements of this section by meeting applicable emission limitations specified in Table 22-1 of this section. Emission limitations in Table 22-1 for turbine engines that are quantified in units of ppmvd shall be corrected to fifteen percent (15%) oxygen.

(2) For any stationary source for which there is no applicable emission limitation in Table 22-1, the owner or operator of such source shall not cause or allow emissions of NOx therefrom in excess of the following:

(A) For fuel-burning equipment fired by a fuel other than those fuels cited in Table 22-1: 0.3 pounds per MMBTU;

(B) For any waste combustor subject to the requirements of subdivision (4) of this subsection: 0.38 pounds per MMBTU;

(C) For any waste combustor not subject to the requirements of subdivision (2)(B) of this subsection which has a waterwall furnace: 0.38 pounds per MMBTU;

(D) For any other waste combustor: 0.33 pounds per MMBTU;

(E) For a glass melting furnace: 5.5 pounds of NOx per ton of glass produced;

(F) For a stationary source, other than a glass melting furnace, that combusts fuel for heating materials: 180 ppmvd, corrected to twelve percent (12%) carbon dioxide; or

(G) For any stationary source not having an emission limitation in subparagraphs (A) through (F) of this subdivision: seven hundred (700) ppmvd.

(3) For a source subject to this section that is also a NOx budget program source: 0.15 pounds per MMBTU during the period from October 1 to April 30, inclusive.

(4) In addition to complying with the emission limitation in subdivision (2)(B) of this subsection, by May 31, 1995 the owner or operator of any waste combustor that combusts refuse derived fuel shall install and operate selective noncatalytic reduction or other NOx emissions control technology capable of reducing the NOx

emission rate by at least thirty percent (30%) from the average emission rate in calendar year 1990 on one boiler unit at such facility. If the Commissioner determines that operations during 1990 were not representative of normal operations of the facility, the Commissioner may use another calendar period that is more representative. In addition, actual annual average NOx emissions from other boiler units at such facility shall each not exceed 420 tons per year. The Commissioner may consider, in the same manner as for other sources, any emission reduction below 0.38 pounds per MMBTU to be eligible as surplus emissions reductions for purposes of emission reduction credits pursuant to subsection (j) of this section until May 31, 1999.

TABLE 22-1

	Gas-fired	Residual-oil-fired	Other-oil-fired	Coal-fired
Turbine engine with MRC ≥ 100 MMBTU/hr	55 ppmvd	not applicable	75 ppmvd	not applicable
Turbine engine with MRC < 100 MMBTU/hr	0.90 lb/MMBTU	not applicable	0.90 lb/MMBTU	not applicable
Cyclone furnace	0.43 lb/MMBTU	0.43 lb/MMBTU	0.43 lb/MMBTU	0.43 lb/MMBTU
Fast-response double-furnace Naval boiler	0.20 lb/MMBTU	0.30 lb/MMBTU	0.30 lb/MMBTU	0.30 lb/MMBTU
Fluidized bed combustor	not applicable	not applicable	not applicable	0.29 lb/MMBTU
Other boiler	0.20 lb/MMBTU	0.25 lb/MMBTU	0.20 lb/MMBTU	0.38 lb/MMBTU
Reciprocating engine	2.5 gm/bk hp-hr	not applicable	8 gm/bk hp-hr	not applicable

(f) **Multi-fuel sources**.

(1) When, pursuant to subsection (d)(1)(B) of this section, the owner or operator of a stationary source subject to this section switches the use of fuel, converts to a new fuel, or is capable of burning two or more different fuels, such owner or operator shall comply with the requirements of this subsection.

(2) The owner or operator of a stationary source that is capable of firing two or more fuels shall not cause or allow emissions of NOx from such source, in excess of the following:

(A) For fuel-burning equipment that simultaneously fires two or more different fuels: an emission limitation calculated by 1) multiplying the heat input of each fuel combusted by the emission limitation established in this section for such fuel, 2) summing those products, and 3) dividing the sum by the total heat input; or

(B) For fuel-burning equipment that is capable of interchangeably firing two or more fuels: the emission limitation in Table 22-1 for the particular equipment and fuel used. Notwithstanding this requirement, the owner or operator of a stationary source that operates exclusively on other oil or gas from May 1 through September 30 of any year and on another fuel during the remainder of the year shall not cause or allow emissions of NOx from such source in excess of 0.2 pounds per MMBTU from May 1 to September 30, inclusive, and 0.29 pounds per MMBTU for the remainder of the year.

(3) The owner or operator of a stationary source that, on or after January 1, 1990, converts the fuel used at such source, shall not cause or allow emissions of NOx from such source in excess of the following:

(A) 0.29 pounds per MMBTU, when such source burned coal to provide more than fifty percent (50%) of its total heat input during the last full calendar year immediately prior to such conversion; or

(B) 0.225 pounds per MMBTU, if such source burned residual oil to provide more than fifty percent (50%) of its total heat input during the last full calendar year immediately prior to such conversion.

(g) **Forty percent (40%) reduction.**

(1) When the owner or operator of a stationary source subject to this section reduces the NOx emission rate from such source by forty percent (40%), as provided in subsection (d)(1)(C) of this section, such owner or operator shall comply with the emission limitations of this section established in a permit issued by the Commissioner. Such permit shall specify such source's NOx emission limitation to be the more restrictive of:

(A) sixty percent (60%) of such source's emission rate at maximum capacity during calendar year 1990; or

(B) sixty percent (60%) of the emission limitation applicable to the source on January 1, 1990.

Such permit shall express the NOx emission limitation in the same units of measurement as the NOx emission limitation that would otherwise apply to such source in subsection (e) of this section.

(2) To determine the actual emission rate specified in subdivision (1)(A) of this subsection, such owner or operator shall conduct an emission test at such source under operating conditions representative of those conditions in existence at the source in calendar year 1990, at the maximum capacity at which the source was operated during such calendar year.

(3) If the Commissioner determines that operations during calendar year 1990 were not representative of normal operations from such source, the Commissioner may use another calendar year which is more representative.

(h) **Reconstruction or replacement**. Repealed.

(i) **Schedule modification.**

(1) If the owner or operator of a stationary source subject to this section proves to the satisfaction of the Commissioner that it is not technologically or economically feasible for such source to comply with the emission limitations in subsections (e) through (g) of this section, except the emission limitation in subsection (e)(3) of this section, the Commissioner may by permit require NOx emission reductions through modifications of the schedule of NOx-emitting activities and implementation of other measures to reduce NOx emissions at such source. Such permit may include restrictions on operations on any day for which the Commissioner has forecast that ozone levels will be ''moderate to unhealthful,'' ''unhealthful,'' or ''very unhealthful.''

(2) This subsection shall only apply to the following:

(A) Oil-fired turbine engines or fast-response double-furnace Naval boilers that generate power to create simulated high-altitude atmospheres for the testing of aircraft engines;

(B) Testing of fuel-burning equipment undergoing research and development; or

(C) Compression-ignition reciprocating engines used exclusively for the training personnel in the operation and maintenance of such engines aboard submarines.

(j) **Emissions reduction trading.**

(1) The owner or operator of a stationary source subject to this section may use NOx DERCs or NOx allowances or both to comply with the applicable emission limitation contained in subsection (e) of this section pursuant to a permit or order issued by the commissioner.

(2) Such owner or operator shall retire one (1) NOx DERC or one (1) NOx allowance for each ton of NOx emitted in excess of the applicable emission limitation in subsection (e) of this section, as calculated pursuant to a permit or order issued by the commissioner. Such owner or operator shall conduct an emission test or submit another method acceptable to the Commissioner to estimate the number of tons of NOx emitted in excess of such applicable emission limitation. Such emission test shall be conducted under operating conditions that demonstrate the maximum emission rate of such source. Such emission test shall be certified pursuant to subsection (k) of this section.

(3) Any creation or use of NOx DERCs or NOx allowances for the purpose of this subsection shall be consistent with the provisions of 40 CFR 51, Subpart U and the U.S. Environmental Protection Agency's ''Emissions Trading Policy Statement,'' published December 4, 1986 (Federal Register, Volume 51, Page 43814). The use of NOx allowances pursuant to this subsection shall also be consistent with the provisions of Section 22a-174-22a(f)(4) and Section 22a-174-22b(i)(5) of the Regulations of Connecticut State Agencies.

(4) Vintage restrictions. For the purposes of this section, the following vintage restrictions shall apply:

(A) Any DERC shall be used for the purpose of compliance with this section within five (5) calendar years from the year of generation; and

(B) Any NO_x allowance allocated to, or otherwise acquired by, the owner or operator of a stationary source subject to this section, if used for the purpose of compliance with this section, shall be used within five (5) calendar years from the year of initial allocation.

(k) **Emissions testing and monitoring.**

(1) The owner or operator of a stationary source subject to an emission limitation under this section shall conduct an emission test to demonstrate compliance with this section no later than one year after becoming subject to this section. Each such emission test shall be conducted in accordance with section 22a-174-5 of the Regulations of Connecticut State Agencies. Compliance with the emission limitations of this section shall be determined based on the average of three (3) one-hour tests, each performed over a consecutive 60-minute period. Any analysis of nitrogen content conducted as part of such emission testing shall be in accordance with Method D-3228 of the American Society for the Testing of Materials. If the commissioner determines that three (3) one-hour tests are not reasonable given the location, configuration or operating conditions of a stationary source, the commissioner may approve testing where compliance with the emission limitations of this section shall be determined based on the average of four (4) fifteen-minute tests, each performed over a consecutive fifteen-minute period. Any owner or operator of a stationary source who has not installed and operated a continuous emissions monitor at such source shall conduct emission testing once every five years from the date of the previous test or five years from the date the previous test was due, whichever is earlier.

(2) The owner or operator shall demonstrate compliance with emission limitations of this section using sampling and analytical procedures approved under 40 CFR

60, Appendix A, or under procedures in section 22a-174-5(d) of the Regulations of Connecticut State Agencies. Sampling shall be conducted when the source is at normal operating temperature and, unless allowed otherwise by the Commissioner in a permit or order, is operating at or above ninety percent (90%) of maximum capacity for a fuel-burning source or a process source, or at or above ninety percent (90%) of design capacity for a waste combustor. Notwithstanding the foregoing requirements of this subdivision:

(A) If the commissioner determines that operating at or above ninety percent (90%) of maximum capacity for a fuel burning source or a process source during sampling is not reasonable given the location, configuration or operating conditions of a source, the commissioner may approve testing of a fuel burning source or process source at an alternative maximum capacity where compliance with the emission limitations of this section shall be determined based on operating at or above ninety percent (90%) of the alternative maximum capacity approved by the commissioner; and

(B) Any source that has operated in excess of one hundred percent (100%) of its maximum capacity at any time since May 31, 1995 shall be tested when the source is operating at or above ninety percent (90%) of its highest operating rate since May 31, 1995.

(3) On and after May 31, 1995, the owner or operator of any source that emitted more than one hundred (100) tons of NOx from a single stack during any calendar year beginning January 1, 1990, shall install, calibrate, maintain, operate and certify a continuous emissions monitor for NOx for each such stack. The owner or operator shall notify the Commissioner in writing at least thirty (30) days prior to conducting any performance or quality assurance testing of any such monitor. Any such testing shall be conducted in accordance with a testing protocol approved by the Commissioner. Any continuous emission monitor for NOx shall be installed, calibrated and operated in accordance with the performance and quality assurance specifications contained in 40 CFR 60, Subpart A, Appendix B and Appendix F.

(4) Unless otherwise specified by the commissioner in a permit or order, the averaging times for the following emission limitations shall be applicable to a source that has or is required to have a continuous emissions monitor for NOx:

(A) For the emissions limitation is subsection (e)(3), the period from October 1 to April 30, inclusive, including all periods of operation, including startup shutdown, and malfunction; and

(B) For any other emission limitation contained in this section, twenty-four (24) hours, measured from midnight at the beginning of any day to midnight of the end of that day, including all periods of operation, including startup, shutdown and malfunction.

(*l*) **Reporting and record keeping.**

(1) The owner or operator of a stationary source subject to this section, shall keep the following records:

(A) For an emergency engine, daily records of operating hours of such engine, identifying the operating hours of emergency and non-emergency use;

(B) For any premises for which subsections (b)(2) or (b)(3) of this section applies, records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether the NOx emissions from such premises on any day from May 1 to September 30, inclusive, are in excess of one hundred thirty-seven (137) pounds for premises located in a severe nonattainment area for ozone or two hundred seventy-four (274) pounds for premises located in a serious nonattainment area for ozone.

(C) Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NOx emissions from such premises in any calendar year are in excess of twenty-five (25) tons for premises located in a severe nonattainment area for ozone or fifty (50) tons for premises located in a serious nonattainment area for ozone;

(D) Records of all tune-ups, repairs, replacement of parts and other maintenance;

(E) Copies of all documents submitted to the Commissioner pursuant to this section;

(F) For any source required to install, calibrate, and operate a continuous emissions monitor for NOx under subdivision (k)(3), all charts, electronically stored data, and printed records produced by such continuous emissions monitor;

(G) Procedures for calculating NOx emission rates in (B) and (C) above;

(H) Records of the dates, times, and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing;

(I) For any source required to install, calibrate, and operate a continuous emissions monitor for NOx under subdivision (k)(3) of this section, records of all performance evaluations, calibration checks and adjustments on such monitor; a record of maintenance procedures; and all data necessary to complete the quarterly reports required under subdivision (*l*)(4) of this section; and

(J) Any other records or reports required by an order or permit issued by the Commissioner pursuant to this section.

(2) Within thirty (30) days of the completion of emission tests conducted under the requirements of subdivision (k)(1) of this section, the owner or operator of such source shall submit a written report of the results of such testing to the Commissioner.

(3) Within sixty (60) days of the completion of certification tests conducted under the requirements of subdivision (k)(3) of this section, the owner or operator of such source shall submit a written report of the results of such testing to the Commissioner.

(4) The owner or operator of any source required to be equipped with a continuous emissions monitor for NOx under subdivision (k)(3) of this section shall submit to the Commissioner written quarterly reports of excess emissions and CEM malfunctions. Such reports shall be submitted to the Commissioner on or before January 30, April 30, July 30, and October 30 and shall include data for the three calendar month period ending the month before the due date of the report. For each period of excess emissions, such report shall include the date and time of commencement and completion of such period, the magnitude and suspected cause of the excess emissions and all actions taken to correct the excess emissions. For each malfunction of the CEM system, such report shall include the date and time of when the malfunction commenced and ended, and all actions taken to correct the malfunction.

(5) The owner or operator of a stationary source subject to this section shall retain all records and reports produced pursuant to the requirements of this section for five (5) years. Such records and reports shall be available for inspection at reasonable hours by the Commissioner or the Administrator. Such records and reports shall be retained at the source, unless the Commissioner approves in writing the use of another location in the State.

(6) On or before April 15 of each year, the owner or operator of a stationary source subject to this section shall submit a report on NOx emissions from such source, on a form provided by the Commissioner.

(7) The Commissioner may use data recorded by continuous emissions monitors for NOx and any other records and reports to determine compliance with applicable requirements of this section.

(m) **Compliance plans.**

(1) The owner or operator of a stationary source subject to this section shall submit a compliance plan to the Commissioner by September 1, 1994, on forms provided by the Commissioner. Such compliance plan shall document how such source will comply with all applicable requirements of this section. The owner or operator of a stationary source that becomes subject to this section after May 1, 1994, shall submit a compliance plan within four (4) months of the date on which such source becomes subject to this section.

(2) Any compliance plan submitted pursuant to this subsection shall include a certification signed by a responsible corporate officer or a duly authorized representative of such officer, as those terms are defined in subdivision 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual delegated by such officer with the responsibility of actually preparing the compliance plan. Such certification shall read as follows: ''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.''

(3) If a compliance plan does not contain all measures necessary to comply with all requirements of this section, the Commissioner may notify the owner or operator of such source of the deficiency. Such owner or operator shall resubmit a revised compliance plan within thirty (30) days of receipt of such notice.

(4) Notwithstanding the provisions of subdivision (1) of this section, the owner or operator of a NOx budget program source who is subject to a revised emission standard shall not be required to submit a revised compliance plan unless the commissioner requests so in writing.

(Effective January 23, 1997; amended December 28, 2000, April 1, 2004, January 1, 2005, April 4, 2006)

Sec. 22a-174-22a.

Repealed, September 4, 2007.

Sec. 22a-174-22b.

Repealed, May 1, 2010.

(Adopted effective September 29, 1999; amended April 4, 2006; repealed September 4, 2007, to take effect on May 1, 2010)

Sec. 22a-174-22c. The clean air interstate rule (CAIR) nitrogen oxides (NO_x) ozone season trading program

(a) **Definitions.** For the purposes of this section, the following definitions apply, provided that any term related to the administration of this section that is not defined in this subsection shall be as defined or described in 40 CFR 96 subpart AAAA and any remaining terms not defined shall be as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies:

(1) ''CAIR NO_x Ozone Season unit'' means a unit that:

(A) Is a ''CAIR NO_x Ozone Season unit'' under 40 CFR 96.304; or

(B) Satisfies the criteria in one of the following clauses:

(i) Is a fossil-fuel-fired emission unit that operated at any time during the period from May through September 1990 and that serves a generator with a nameplate capacity of fifteen (15) megawatts or more,

(ii) Is a fossil-fuel-fired emission unit that serves a generator that generates electricity at a rated output of fifteen (15) megawatts or more by employing ''cogeneration technology,'' as defined in section 16-1 of the Connecticut General Statutes,

(iii) Is a fossil-fuel-fired boiler or indirect heat exchanger with a maximum design heat input of 250 MMBtu/hr or more, or

(iv) Is a fossil-fuel-fired emission unit that began operating after September 30, 1990 and that serves a generator that generates electricity at a rated output of fifteen (15) megawatts or more.

(2) ''CAIR NATS'' means ''CAIR NO_x Ozone Season Allowance Tracking System'' as defined in 40 CFR 96.302.

(3) ''Coal-fired'' means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year.

(4) ''Combined heat and power system'' or ''CHP system'' means a generation unit that sequentially produces both electric power and thermal energy from a single source.

(5) ''Commence commercial operation'' means, with regard to a unit:

(A) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in subparagraph (B) of this definition and 40 CFR 96.305.

(i) For a unit that is a CAIR NO_x Ozone Season unit on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph (A) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a CAIR NO_x Ozone Season unit on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph (A) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date of commencement of commercial operation as defined in subparagraph (A) or (B) of this definition as appropriate.

(B) Except as provided in 40 CFR 96.305, for a unit that is not a CAIR NO_x Ozone Season unit on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph (A) of this definition, the unit's date of commencement of commercial operation shall be the date on which the unit becomes a CAIR NO_x Ozone Season unit.

(i) For a unit with a date of commencement of commercial operation as defined in subparagraph (B) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date of commencement of commercial operation as defined in subparagraph (B) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated

as a separate unit with a separate date of commencement of commercial operation as defined in subparagraph (A) or (B) of this definition as appropriate.

(C) Notwithstanding subparagraphs (A) and (B) of this definition, for a unit not serving a generator producing electricity for sale, the unit's date of commencement of operation shall also be the unit's date of commencement of commercial operation.

(6) ''Commence operation'' means:

(A) To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber, except as provided in subparagraph (B) of this definition, provided that:

(i) For a unit that has undergone a physical change other than replacement of the unit by a unit at the same source after the date the unit commences operation as defined in subparagraph (A) of this definition, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit, and

(ii) For a unit that is replaced by a unit at the same source after the date the unit commences operation as defined in subparagraph (A) of this definition, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date of commencement of operation as defined in subparagraphs (A)(i) or (A)(ii) of this definition, as appropriate.

(B) Solely for purposes of 40 CFR 96, subpart HHHH, for a unit that is not a CAIR NO_x Ozone Season unit on the later of November 15, 1990 or the date the unit commences operation as defined in subparagraph (A) of this definition and that subsequently becomes a CAIR NO_x Ozone Season unit, the unit's date of commencement of operation shall be the date on which the unit becomes a CAIR NO_x Ozone Season unit provided that:

(i) For a unit that subsequently undergoes a physical change other than replacement of the unit by a unit at the same source after the date the unit commences operation as defined in subparagraph (B) of this definition, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit, and

(ii) For a unit that is replaced by a unit at the same source after the date the unit commences operation as defined in subparagraph (B) of this definition, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date of commencement of operation as defined in subparagraph (A) or (B) of this definition, as appropriate.

(7) ''Energy efficiency project'' or ''EEP'' means the installation or implementation at a stationary source of one or more of the measures listed in subparagraphs (A) through (E) of this definition that is not otherwise required by law or regulation and that results in energy savings at a facility located in the State of Connecticut:

(A) The construction of a new building or addition that exceeds the minimum energy efficiency requirements of the State Building Code;

(B) The installation, replacement or modification of equipment, fixtures or materials;

(C) The commencement or modification of building or facility operation and maintenance procedures;

(D) A combined heat and power system; or

(E) Any other measure approved by the commissioner in writing.

Projects that do not result in energy savings, such as reductions in labor and load shifting, projects resulting in energy savings for a CAIR NO_x Ozone Season unit and mobile source measures are not considered EEPs.

(8) ''Energy Efficiency and Renewable Energy Set-Aside Baseline Period'' or ''EERESA Baseline Period'' means either of the two control periods, as approved by the commissioner, preceding the year in which an EEP, a renewable energy project (REP) or a qualifying other project (QOP), as defined in this section, is first put in use or first becomes operational. The EERESA Baseline Period remains constant when calculating CAIR NO_x Ozone Season allowance allocations for such REP, EEP or QOP in any subsequent year.

(9) ''EERESA Representative'' means a person who aggregates any combination of one or more renewable energy projects, energy efficiency projects or qualifying other projects, to equal at least one whole allowance, or who aggregates two or more years of operation by a single project, to equal at least one whole allowance. An EERESA representative includes, but is not limited to, the following: a common owner of the aggregated projects, an energy service company, an emission trading broker or a state or municipal entity.

(10) ''Fossil-fuel-fired'' means:

(A) With regard to a unit, combusting any amount of fossil fuel in any calendar year; or

(B) Solely for purposes of applying subparagraph (B) of the definition of ''CAIR NO_x Ozone Season unit'' in subsection (a) of this section, the combustion of fossil fuel, any derivative of fossil fuel alone, or a combination of fuels, of which fossil fuel:

(i) Comprises more than fifty percent (50%) of the annual heat input (in Btu) in 1990 or any year thereafter; or

(ii) Is projected to comprise more than fifty percent (50%) of the annual heat input (in Btu), provided that the commissioner shall consider an emission unit as ''fossil-fuel fired'' upon the date such emission unit begins combusting fossil fuel.

(11) ''Gross energy input'' means total fuel-related heat input in Btus per unit of time, based upon the higher heating value of fuel.

(12) ''Indirect heat exchanger'' means combustion equipment in which the flame or products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls, and that emits exhaust gases only through a stack. Indirect heat exchangers include, but are not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, pyrolysis heaters and fuel-fired reactors.

(13) ''Industrial Unit'' means a fossil-fuel-fired boiler or indirect heat exchanger with a maximum design heat input of 250 MMBtu/hr or more.

(14) ''Nameplate capacity'' means, solely for purposes of applying subparagraph (B) of the definition of ''CAIR NO_x Ozone Season unit'' in subsection (a) of this section, the maximum electrical generating output (in MW electrical) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

(15) ''Net electricity output'' means the gross electric generation (in MWh) less any of the energy output consumed in the process of generation.

(16) ''New Unit'' means any fossil-fuel-fired unit that commences operation on or after January 1, 2006 and that serves a generator that generates electricity at a rated output of fifteen (15) megawatts or more.

(17) ''Normal system operation'' means all times of operation except periods of startup, shutdown or malfunction; commissioner-approved stack testing; or intentional sootblowing, fuel switching or sudden load changing.

(18) ''Permitting authority'' shall mean ''commissioner'' as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies, except for purposes of the definitions of ''Allocate or allocation'' and ''CAIR NO_x Ozone Season allowance'' in 40 CFR 96.302, in which case ''permitting authority'' shall have the same meaning as in 40 CFR 96 subpart AAAA.

(19) ''Phase I Unit'' means a CAIR NO_x Ozone Season unit that is a fossil-fuel-fired unit that operated at any time prior to November 15, 1990 and that serves a generator with a nameplate capacity of fifteen (15) megawatts or more.

(20) ''Phase II Unit'' means a fossil-fuel-fired unit that began operating on or after November 15, 1990, that serves a generator that generates electricity at a rated output of fifteen (15) megawatts or more.

(21) ''Proponent'' means any person who owns, leases, operates or controls an energy efficiency project, a renewable energy project or a qualifying other project, or an EERESA representative.

(22) ''Prospective project'' means a REP, EEP or QOP that is not in operation but for which the owner has awarded contracts for installation or purchase of components or begun on-site construction or installation.

(23) ''Qualifying other project'' or ''QOP'' means the implementation or installation of a measure at a stationary source that is not otherwise required by law or regulation, that results in thermal or electric energy savings, that is not an EEP or a REP and that is approved by the commissioner in writing.

(24) ''Reciprocating grate waste tire fired Unit'' means an emissions unit combusting a single item waste stream of tires that began operating on or after November 15, 1990, that serves a generator that generates electricity at a rated output of fifteen (15) megawatts or more.

(25) ''Renewable energy'' means energy generated by one or more of the following fuels, energy resources or technologies, and that does not emit NO_x: solar photovoltaic or solar thermal energy; wind energy; fuel cells, which do not employ a fuel processor that emits NO_x; ocean thermal, wave or tidal energy; or hydro and geothermal energy.

(26) ''Renewable energy project'' or ''REP'' means one or more generation units producing renewable energy, located in the State of Connecticut or directly and solely connected to transmission facilities in the State of Connecticut, exclusive of a generation unit that has been awarded CAIR NO_x Ozone Season allowances under another program administered by federal or state government.

(27) ''State Building Code'' means the State Building Code adopted pursuant to section 29-252 of the Connecticut General Statutes.

(28) ''State trading budget'' means ''Connecticut emission budget'' as identified in subsection (c) of this section.

(29) ''Unit of production'' means a manufactured item or raw, intermediate or final material, including steam or other product, measured in discrete units and produced as a result of the consumption of energy in a specific process or by a piece of equipment.

(30) ''Useful net thermal energy'' means, for a REP generating thermal energy or for use of a CHP system, the energy output of thermal energy used for heating, cooling, industrial processes or other beneficial uses.

(b) **Applicability.**

(1) This section shall apply to the owner or operator of a CAIR NO_x Ozone Season unit.

(2) Except as provided in subsection (i)(4) of this section, the requirements of section 22a-174-22b of the Regulations of Connecticut State Agencies shall not apply to the control period beginning May 1, 2009 and any control period thereafter.

(c) **Connecticut emission budget.**

(1) The Connecticut emission budget is two thousand six hundred ninety one (2,691) tons of NO_x during each control period for each year beginning in 2009.

(2) The commissioner shall implement the Connecticut emission budget by allocation of NO_x allowances as described in subsection (e) of this section.

(3) The commissioner shall establish the following accounts in the CAIR NATS:

(A) The Connecticut State Account, to hold the Connecticut emission budget for allocation to the compliance accounts of CAIR NO_x Ozone Season units; and

(B) The Connecticut Retirement Account, to hold NO_x allowances exacted for purposes other than compliance with this section and permanently retired.

(d) **Allocation timing.**

(1) For CAIR NO_x Ozone Season units other than New Units, the commissioner shall allocate CAIR NO_x Ozone Season allowances according to the following schedule:

(A) No later than April 30, 2007, determine and notify the Administrator of each CAIR NO_x Ozone Season unit's allocation of CAIR NO_x Ozone Season allowances for the 2009, 2010 and 2011 control periods;

(B) No later than October 31, 2008, determine and notify the Administrator of each CAIR NO_x Ozone Season unit's allocation of CAIR NO_x Ozone Season allowances for the 2012 control period; and

(C) No later than October 31, 2009 and each year thereafter, determine and notify the Administrator of each CAIR NO_x Ozone Season unit's allocation of CAIR NO_x Ozone Season allowances for the control period in the fourth calendar year after the year in which the notification is to be submitted.

(2) For New Units, the commissioner shall allocate CAIR NO_x Ozone Season allowances as follows:

(A) A New Unit commencing operation between January 1 and September 30, 2006, inclusive:

(i) Shall be considered a New Unit for the purpose of allocating CAIR NO_x Ozone Season allowances during the 2009 through 2011 control periods, and

(ii) Shall be considered a Cogeneration Unit, an Industrial Unit, a Reciprocating grate waste tire fired Unit or a Phase II Unit for the purpose of allocating CAIR NO_x Ozone Season allowances for the 2012 and later control periods;

(B) A New Unit commencing operation between October 1, 2006 and September 30, 2007, inclusive:

(i) Shall be considered a New Unit for the purpose of allocating CAIR NO_x Ozone Season allowances during the 2009 through 2012 control periods, and

(ii) Shall be considered a Cogeneration Unit, an Industrial Unit, a Reciprocating grate waste tire fired Unit or a Phase II Unit for the purpose of allocating CAIR NO_x Ozone Season allowances for the 2013 and later control periods;

(C) A New Unit commencing operation between October 1, 2007 and September 30, 2008, inclusive:

(i) Shall be considered a New Unit for the purpose of allocating CAIR NO_x Ozone Season allowances during the 2009 through 2013 control periods, and

(ii) Shall be considered a Cogeneration Unit, an Industrial Unit, a Reciprocating grate waste tire fired Unit or a Phase II Unit for the purpose of allocating CAIR NO_x Ozone Season allowances for the 2014 and later control periods; and

(D) A New Unit commencing operation after September 30, 2008:

(i) Shall be considered a New Unit for the period of time commencing with initial operation through operation during the sixth control period or portion thereof following date of initial operation, and

(ii) Shall be considered a Cogeneration Unit, an Industrial Unit, a Reciprocating grate waste tire fired Unit or a Phase II Unit for the purpose of allocating CAIR NO_x Ozone Season allowances for the seventh and later control periods.

(3) For New Units, the commissioner will determine and notify the Administrator of each New Unit's allocation of CAIR NO_x Ozone Season allowances by July 31 of the year for which the CAIR NO_x Ozone Season allowances are allocated.

(e) **CAIR NO_x Ozone Season allowance allocations.**

(1) In applying the provisions of this subsection to a CAIR NO_x Ozone Season unit, such unit shall be categorized as a Phase I Unit, a Cogeneration Unit, an Industrial Unit, a New Unit, a Reciprocating grate waste tire fired Unit or a Phase II Unit, as applicable. CAIR NO_x Ozone Season units meeting the definition of Cogeneration Unit shall not be categorized as a Phase I Unit, Industrial Unit, Reciprocating grate waste tire fired Unit or a Phase II Unit. CAIR NO_x Ozone Season units meeting the definition of Industrial Unit shall not be categorized as a Phase I Unit, Cogeneration Unit, Reciprocating grate waste tire fired Unit or a Phase II Unit.

(2) For the control period commencing May 1, 2009 and through the 2014 control period, the commissioner shall allocate among the owners or operators of CAIR NO_x Ozone Season units, other than New Units, up to two thousand two hundred twenty-three (2,223) CAIR NO_x Ozone Season allowances.

(3) For the control period commencing May 1, 2015 and each control period thereafter, the commissioner shall allocate among the owners or operators of CAIR NO_x Ozone Season units, other than New Units, up to two thousand two hundred eighty-nine (2,289) CAIR NO_x Ozone Season allowances.

(4) For the control period commencing May 1, 2009 and through the 2014 control period, the commissioner shall allocate among the owners or operators of New Units up to two hundred (200) CAIR NO_x Ozone Season allowances.

(5) For the control period commencing May 1, 2015 and each control period thereafter, the commissioner shall allocate among the owners or operators of New Units up to one hundred thirty-four (134) CAIR NO_x Ozone Season allowances.

(6) For the control period commencing May 1, 2009 and each control period thereafter, the commissioner shall allocate up to two hundred sixty-eight (268) CAIR NO_x Ozone Season allowances to Proponents in accordance with subsection (f) of this section.

(7) For the 2009, 2010, and 2011 control periods, the commissioner, in the following manner and order, shall:

(A) Allocate to the compliance account of each Cogeneration Unit, Industrial Unit and Reciprocating grate waste tire fired Unit the number of CAIR NO_x Ozone Season allowances equal to the product of the following equation:

$$\frac{\left(ER \ x \ HI_{AVG}\right)}{2000 \frac{lb}{ton}}$$

Where:

ER = The lowest of:

(i) the unit's NO_x RACT emission rate (in lb/mmBtu of heat input) during the 2005 and 2006 control periods, as required in section 22a-174-22 of the Regulations of Connecticut State Agencies, or

(ii) the unit's average permitted NO_x emission rate (in lb/mmBtu of heat input) during the 2005 and 2006 control periods, or

(iii) the average of the unit's actual NO_x emission rate (in lb/mmBtu of heat input) during the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period.

HI_{AVG} = the unit's actual average heat input (in mmBtu) during the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period

(B) Allocate to the compliance account of each Phase I Unit the number of CAIR NO_x Ozone Season allowances equal to the product of the following equation:

$$\frac{\left(1.2\ \frac{lb}{MWh}\ x\ EO_U\right)}{2000\ \frac{lb}{ton}}$$

Where:

EO_U = each Phase I Unit's average net electricity output (in MWh) during the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period

(C) Allocate to the compliance account of each Phase II Unit the number of CAIR NO_x Ozone Season allowances equal to the product of the following equation:

$$\left(A - A_{ALLOCATED}\right) \text{x} \left(\frac{EO_U}{EO_{TOTAL}}\right)$$

Where:

A = 2,223 CAIR NO_x Ozone Season allowances

$A_{ALLOCATED}$ = the total number of CAIR NO_x Ozone Season allowances allocated to Industrial Units, Cogeneration Units, Reciprocating grate waste tire fired Units and Phase I Units in a given year pursuant to subdivisions (7)(A) and (7)(B) of this subsection

EO_U = the Phase II Unit's average net electricity output (in MWh) for the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period

EO_{TOTAL} = the total average net electricity output (in MWh) of all Phase II Units during the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period

(D) Any owner or operator may submit a written request for the commissioner's review and approval for the use of an alternate two-year control period pursuant to sections 22a-174-22c(e)(7)(A), (B) or (C) of the Regulations of Connecticut State Agencies if the average NO_x emission rate, average heat input or average net electricity output data from the CAIR NO_x Ozone Season unit during the 2005 and 2006 control periods was not representative for the following reasons:

(i) Transmission line failure,

(ii) Equipment failure, or

(iii) Any other reason related to unplanned outage.

(8) For the 2012 control period, and each control period thereafter, the commissioner, in the following manner and order, shall:

(A) Allocate to the compliance account of each Cogeneration Unit, Industrial Unit, and Reciprocating grate waste tire fired Unit the number of CAIR NO_x Ozone Season allowances equal to the product of the following calculation:

$$\frac{\left(ER \text{ x } HI_{AVG} \right)}{2000 \frac{lb}{ton}}$$

Where:

ER = the lowest of:

(i) the unit's NO_x RACT emission rate (in lb/mmBtu of heat input), during the 5th and 6th control periods preceding the year of allocation, as required in section 22a-174-22 of the Regulations of Connecticut State Agencies, or

(ii) the unit's average permitted NO_x emission rate (in lb/mmBtu of heat input) during the 5th and 6th control periods preceding the year of allocation, or

(iii) the average of the unit's actual NO_x emission rate (in lb/mmBtu of heat input) during the 5th and 6th control periods preceding the year of allocation.

HI_{AVG} = the unit's actual average heat input (in mmBtu) during the 5th and 6th control periods preceding the year of allocation

(B) Allocate to the compliance account of each Phase I Unit and Phase II Unit the number of CAIR NO_x Ozone Season allowances equal to the product of the following equation:

$$\left(A - A_{ALLOCATED}\right) \text{x} \left(\frac{EO_U}{EO_{TOTAL}}\right)$$

Where:

A = 2,223 CAIR NO_x Ozone Season allowances for 2009 through 2014; 2,289 CAIR NO_x Ozone Season allowances for 2015 and beyond

$A_{ALLOCATED}$ = the total number of CAIR NO_x Ozone Season allowances allocated to Industrial Units, Cogeneration Units and Reciprocating grate waste tire fired Units pursuant to subdivision (8)(A) of this subsection for the control period

EO_U = each Phase I and Phase II Unit's average net electricity output (in MWh) during the 5th and 6th control periods preceding the year of allocation

EO_{TOTAL} = the total average net electricity output (in MWh) of Phase I and Phase II Units during the 5th and 6th control periods preceding the year of allocation

(9) By July 31 of the 2009 control period and each control period thereafter, the commissioner shall:

(A) Allocate to the compliance account of each New Unit the number of CAIR NO_x Ozone Season allowances equal to the product of the following equation, subject to the limitation in subparagraph (B) of this subdivision:

$$\frac{\left(ER \ x \ HIR \ x \ HO_{CP}\right)}{2000 \frac{lb}{ton}}$$

Where:

ER = the lower of:
(i) 0.12 lb/MMBtu, or
(ii) the unit's permitted NO_x emission rate (in lb/mmBtu of heat input) during the control period.

HIR = the lower of:
(i) the unit's maximum design heat input (in mmBtu/hr), or
(ii) the unit's permitted heat input rate (in mmBtu/hr) during the control period.

HO_{CP} = the number of hours the unit operated during the prior control period, rounded to the nearest whole hour by rounding down for decimals less than 0.5, and rounded up for decimals of 0.5 or greater. If the unit did not operate during the prior control period, the number of hours shall be determined by the commissioner based on information submitted pursuant to subsection (i)(2) of this section

(B) For 2009 through 2014:

IF $\sum NUA_{CALCULATED} < 200$, THEN

$A_{ALLOCATED\text{-}NU} = A_{NU}$.

IF $\sum NUA_{CALCULATED} > 200$, THEN

$$A_{ALLOCATED\text{-}NU} = A_{NU} \text{ x } \left(\frac{200}{\sum NUA_{CALCULATED}} \right)$$

rounded to the nearest whole allowance, as appropriate.

For 2015 and beyond:

IF $\sum NUA_{CALCULATED} < 134$, THEN

$A_{ALLOCATED\text{-}NU} = A_{NU}$.

IF $\sum NUA_{CALCULATED} > 134$, THEN

$$A_{ALLOCATED\text{-}NU} = A_{NU} \text{ x } \left(\frac{134}{\sum NUA_{CALCULATED}} \right)$$

rounded to the nearest whole allowance, as appropriate.

Where:

$\sum NUA_{CALCULATED}$ = the total number of CAIR NO_x Ozone Season allowances calculated for New Units pursuant to subdivision (9)(A) of this subsection

$A_{ALLOCATED\text{-}NU}$ = the number of CAIR NO_x Ozone Season allowances the commissioner shall allocate to the compliance account of each New Unit

A_{NU} = the number of CAIR NO_x Ozone Season allowances calculated for each New Unit pursuant to subdivision (9)(A) of this subsection

The commissioner may adjust an allowance allocation under this subparagraph as necessary to not exceed $\sum NUA_{CALCULATED}$.

(C) Allocate to the compliance account of each Phase I and Phase II Unit the number of CAIR NO_x Ozone Season allowances, if any, equal to the product of the following equation:

For 2009 through 2014:

$$\left[\left(200 - A_{ALLOCATED\text{-}NU}\right) + \left(268 - A_{ALLOCATED\text{-}P}\right) \text{ x } \left(\frac{EO_U}{EO_{TOTAL}} \right) \right]$$

For 2015 and beyond:

$$\left[\left(134 - A_{ALLOCATED\text{-}NU}\right) + \left(268 - A_{ALLOCATED\text{-}P}\right) \times \left(\frac{EO_U}{EO_{TOTAL}}\right) \right]$$

Where:

$A_{ALLOCATED\text{-}NU}$ = The number of CAIR NO_x Ozone Season allowances allocated to New Units pursuant to subdivision (9)(A) of this subsection for the current year control period.

$A_{ALLOCATED\text{-}P}$ = The number of CAIR NO_x Ozone Season allowances allocated to Proponents pursuant to subsection (f) of this section for the current year control period.

EO_U = For the years 2009 through 2011, each Phase I and Phase II Unit's average net electricity output (in MWh) during the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period. For the year 2012 and each year thereafter, each Phase I and Phase II Unit's average net electricity output (in MWh) during the 5th and 6th control periods preceding the year of allocation.

EO_{TOTAL} = For the years 2009 through 2011, the total average net electricity output (in MWh) of Phase I and Phase II Units during the 2005 and 2006 control periods, unless the owner or operator submits a written request for the commissioner's review and approval, for the use of an alternate two-year control period during 2003 through 2006, including justification and data for such alternate two-year control period. For the year 2012 and each year thereafter, the total average net electricity output (in MWh) of Phase I and Phase II Units during the 5th and 6th control periods preceding the year of allocation.

(D) Any owner or operator may submit a written request for the commissioner's review and approval for the use of an alternate two-year control period pursuant to Regulations of Connecticut State Agencies section 22a-174-22c(e)(9)(C) if average net electricity output data from the CAIR NO_x Ozone Season unit during the 2005 and 2006 control periods was not representative for the following reasons:

(i) Transmission line failure,

(ii) Equipment failure, or

(iii) Any other reason related to unplanned outage.

(10) In 2010, the commissioner may conduct a review of the CAIR NO_x Ozone Season allowance allocation methodology in this subsection.

(11) For the purposes of this subsection, the term ''Cogeneration Unit'' means a stationary, fossil-fuel-fired emission unit that serves a generator that generates electricity at a rated output of fifteen (15) megawatts or more by employing ''cogeneration technology'' as defined in section 16-1 of the Connecticut General Statutes.

(f) **Energy Efficiency and Renewable Energy Set-Aside (EERESA) Allocation.**

(1) Annual Allowance Allocations. For the control period commencing May 1, 2009 and each control period thereafter, the commissioner shall:

(A) Allocate to the compliance account of each Proponent of a REP generating electrical energy the number of CAIR NO_x Ozone Season allowances equal to the amount determined by the following equation, subject to the limitation in subparagraph (H) of this subdivision:

$$\frac{\left(EEG \text{ x } 1.5\frac{lb}{MWh}\right)}{2000\ \frac{lb}{ton}}$$

Where:

EEG = the net electrical energy generated by the REP (in MWh) during the control period

(B) Allocate to the compliance account of each Proponent of a REP generating useful net thermal energy the number of CAIR NO_x Ozone Season allowances equal to the amount determined by the following equation, subject to the limitation in subparagraph (H) of this subdivision:

$$\frac{\left(TEG \text{ x } 0.44\frac{lb}{mmBtu}\right)}{2000\ \frac{lb}{ton}}$$

Where:

TEG = the useful net thermal energy (in mmBtu) generated by the REP during the control period

(C) Allocate to the compliance account of each Proponent of an EEP saving electrical energy the number of CAIR NO_x Ozone Season allowances equal to the amount determined by the following calculation, subject to the limitation in subparagraph (H) of this subdivision:

$$\frac{\left(EES \text{ x } 1.5\frac{lb}{MWh}\right)}{2000\ \frac{lb}{ton}}$$

Where:

EES = the amount of electrical energy saved by the EEP (in MWh) during the control period, calculated according to subparagraphs (C)(i) and (C)(ii) of this subdivision

(i) Except as provided in subparagraph (C)(ii) of this subdivision, the amount of electrical energy saved shall be calculated by comparing the amount of electrical energy consumed during the control period in the calendar year preceding the year

in which the application is submitted to the amount of electrical energy consumed during the EERESA Baseline Period. If monthly data for electrical energy consumed is not available, then electrical energy savings shall be calculated by comparing the electrical energy consumed during the calendar year preceding the year in which the application is submitted to the amount of electrical energy consumed during the calendar year in which the EERESA Baseline Period occurred, multiplied by five-twelfths, and

(ii) For the construction of a new building or addition that exceeds the energy efficiency requirements of the State Building Code, the amount of electrical energy saved shall be calculated by comparing the amount of electrical energy consumed during the first full control period immediately preceding the year the application is submitted to the amount of electrical energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to the minimum energy efficiency requirements of the State Building Code. If monthly data for electrical energy consumed is not available then electrical energy savings shall be calculated by comparing the electrical energy consumed during the calendar year preceding the year the application is submitted to the amount of electrical energy that would have been consumed at the same occupancy level during the calendar year if the building or addition had been constructed according to the minimum energy efficiency requirements of the State Building Code, multiplied by five-twelfths;

(D) Allocate to the compliance account of each Proponent of an EEP saving thermal energy the number of CAIR NO_x Ozone Season allowances equal to the amount determined by the following equation, subject to the limitation in subparagraph (H) of this subdivision:

$$\frac{\left(TES \text{ x } 0.44 \frac{lb}{mmBtu}\right)}{2000 \frac{lb}{ton}}$$

Where:

TES = the amount of thermal energy saved by the EEP (in mmBtu) during the control period calculated according to subparagraphs (D)(i) and (D)(ii) of this subdivision

(i) Except as provided in subparagraph (D)(ii) of this subdivision, the amount of thermal energy saved shall be calculated by comparing the amount of thermal energy consumed during the control period in the calendar year preceding the year in which the application is submitted to the amount of thermal energy consumed during the EERESA Baseline Period. If monthly data for thermal energy consumed is not available, then thermal energy savings shall be calculated by comparing the thermal energy consumed during the calendar year preceding the year in which the application is submitted to the amount of thermal energy consumed during the calendar year in which the EERESA Baseline Period occurred, multiplied by five-twelfths, and

(ii) For the construction of a new building or addition that exceeds the energy efficiency requirements of the State Building Code, the amount of thermal energy saved shall be calculated by comparing the amount of thermal energy consumed during the first full control period immediately preceding the year the application is submitted to the amount of thermal energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to the minimum energy efficiency requirements of the

State Building Code. If monthly data for thermal energy consumed is not available then thermal energy savings shall be calculated by comparing the thermal energy consumed during the calendar year immediately preceding the year the application is submitted to the amount of thermal energy that would have been consumed at the same occupancy level during the calendar year if the building or addition had been constructed according to the minimum energy efficiency requirements of the State Building Code, multiplied by five-twelfths;

(E) Allocate to the compliance account of each Proponent of an EEP saving thermal or mechanical energy in a manufacturing process where energy consumption is measured on a unit of production basis, the number of CAIR NO_x Ozone Season allowances equal to the amount determined by the following equation, subject to the limitation in subparagraph (H) of this subdivision:

$$\frac{\left(\frac{EC_1}{PP_1} - \frac{EC_2}{PP_2}\right) \text{ x } PP_2 \text{ x } NE_2 \text{ x } \left[1 + \left(\frac{NE_1 - NE_2}{NE_1}\right)\right]}{2000 \frac{lb}{ton}}$$

Where:

EC_1 = Energy consumed during the EERESA Baseline Period in mmBtu. If monthly data is not available for the control period, then EC_1 = the amount of energy consumed during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths

PP_1 = Units of product produced per EERESA Baseline Period. If monthly data is not available for the control period, then PP_1 = the units of product produced during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths

NE_1 = NO_x emitted during the consumption of energy, measured in pounds per mmBtu heat input during the EERESA Baseline Period. If monthly data is not available for the control period, then NE_1 = NO_x emitted during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths

EC_2 = Energy consumed during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period, then EC_2 = energy consumed during the calendar year before the year in which the application is submitted, multiplied by five-twelfths

PP_2 = Units of product produced during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period then PP_2 = units of product produced during the calendar year before the year in which the application is submitted, multiplied by five-twelfths

NE_2 = NO_x emitted during the consumption of energy, measured in pounds per mmBtu heat input during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period then NE_2 = NO_x emitted during the calendar year before the year in which the application is submitted, multiplied by five-twelfths

(F) Allocate to the compliance account of each Proponent of a combined heat and power system with actual energy efficiency equal to or greater than 60%, as determined according to the equation in subparagraph (F)(i) of this subdivision, the number of CAIR NO_x Ozone Season allowances equal to the amount determined by the equation in subparagraph (F)(ii) of this subdivision, subject to the limitation in subparagraph (H) of this subdivision:

(i) $$\text{Eff\%} = \frac{(NEO + UTO)}{GEI}$$

Where:

Eff% = Actual energy efficiency

NEO = Net electricity output of the system converted to British thermal units, (Btus) per unit of time

UTO = Net useful thermal energy output, in Btus per unit of time

GEI = Gross energy input, and

(ii) $$\frac{NOx_{CONV} - NOx_{CHP}}{2000\,\frac{lb}{ton}}$$

Where:

$$NOx_{CONV} = \left\{ \frac{\left[\frac{NEE \times \left(3412\,\frac{Btu}{kWh}\right)}{0.34} + \frac{NUTE}{0.8} \right]}{1{,}000{,}000\,\frac{Btu}{mmBtu}} \right\} \times 0.15\,\frac{lb}{mmBtu}$$

$$NOx_{CHP} = \left\{ \frac{HI}{1{,}000{,}000 \frac{Btu}{mmBtu}} \right\} \text{x } NOx_{RATE}$$

NEE = the number of kilowatt-hours of net electrical energy generated by the system during the EERESA Baseline Period. If monthly data is not available for the EERESA Baseline Period, then the number of kilowatt-hours of net electrical energy generated by the system during any one of the three calendar years before the year in which the system first generated energy, multiplied by five-twelfths

NUTE = the number of British thermal units (Btu) of net useful thermal energy used by the system for space, water or industrial process heat during a control period. If monthly data is not available for the control period, then NUTE = the number of British thermal units (Btu) of net useful thermal energy used by the system for space, water or industrial process heat during a calendar year, multiplied by five-twelfths

HI = the heat input of fuel used by the system to produce electrical or thermal energy during the EERESA Baseline Period. If monthly data is not available for the EERESA Baseline Period, then HI = the heat input of fuel used by the system to produce electrical or thermal energy during any one of the three calendar years before the year during which the system first generated energy, multiplied by five-twelfths

NOx_{RATE} = NO_x emitted in normal system operation by the project (lbs NO_x/mmBtu)

(G) Allocate to the compliance account of each Proponent of a QOP the number of CAIR NO_x Ozone Season allowances equal to an amount determined under subparagraphs (A) through (F), inclusive, of this subdivision, as may be applicable, or an amount determined by the commissioner, subject to the limitation in subparagraph (H) of this subdivision; and

(H) IF $\sum PA_{CALCULATED} \leq 268$, THEN

$$A_{ALLOCATED\text{-}P} = A_P.$$

IF $\sum PA_{CALCULATED} > 268$, THEN

$$A_{ALLOCATED\text{-}P} = Ap \times \left(\frac{268}{\sum PA_{CALCULATED}} \right)$$

Where:

$\sum PA_{CALCULATED}$ = the total number of CAIR NO_x Ozone Season allowances calculated for Proponents pursuant to subparagraphs (A) through (G), as applicable, of this subdivision

$A_{ALLOCATED\text{-}P}$ = the number of CAIR NO_x Ozone Season allowances the commissioner shall allocate to the compliance account of each Proponent

A_P = the number of CAIR NO_x Ozone Season allowances calculated for each Proponent pursuant to subparagraphs (A) through (G), as applicable, of this subdivision

(2) Only REPs that were built and began generating energy and EEPs and QOPs that were built and in use, or installed and operational, on or after January 1, 2001 are eligible to receive CAIR NO_x Ozone Season allowances.

(3) Each Proponent shall apply to the commissioner to receive an allocation of CAIR NO_x Ozone Season allowances from the EERESA according to the following procedures:

(A) Prior to submitting an application to receive an allocation of CAIR NO_x Ozone Season allowances from the EERESA, each Proponent shall establish a general account in accordance with 40 CFR 96.351;

(B) All applications shall be submitted on the Department's Energy Efficiency and Renewable Energy Set-Aside Allowance Application form and shall include the following information:

(i) A description of the project that includes the installation date and the estimated lifetime, a calculation of the amount of energy saved or generated and an explanation of the electricity monitoring and verification method,

(ii) If the project requires approval by the commissioner as an EEP or a QOP, a request for such approval,

(iii) Any additional information that the commissioner may request, and

(iv) A certification prepared and signed as required by section 22a-174-2a(a) of the Regulations of Connecticut State Agencies;

(C) In 2009, and each year thereafter, Proponents shall submit applications to the Department by February 1 of each year. The designated year in which the allowances are allocated shall correspond to the calendar year in which the application is submitted. The allocation shall be based on the energy saved or generated in the calendar year or, for projects aggregated over several years of operation, years preceding the year in which the application is submitted;

(D) A Proponent may request an allocation of allowances from the EERESA for a maximum of five (5) years at a time. A separate verification of operation and calculation of energy generation or energy savings shall be submitted annually for each year during which a REP generates energy or an EEP or a QOP saves energy;

(E) Only one Proponent may submit an application to be allocated allowances from the EERESA for a single REP, EEP or QOP in a single calendar year. If more than one Proponent submits an application for the same project for the same calendar year, the commissioner, at his or her discretion, may refuse to accept such applications; and

(F) A Proponent shall not submit an application under this subsection for energy generation or energy savings equivalent to less than one whole allowance. An EERESA Representative may submit an application that:

(i) Aggregates any combination of one or more REPs, EEPs or QOPs that individually save or generate energy in a single calendar year equivalent to less than one allowance but for which the energy savings or generation is equivalent to a minimum of one whole allowance when aggregated,

(ii) Aggregates two or more years of operation by a single REP, EEP or QOP that saves or generates energy equivalent to less than one allowance in a single year but for which the energy savings or generation is equivalent to a minimum of one whole allowance when aggregated, and

(iii) Aggregates two or more years of operation by any combination of one or more REPs, EEPs or QOPs that save or generate energy in a single calendar year equivalent to less than one whole allowance when aggregated but for which the energy savings or generation is equivalent to a minimum of one whole allowance when aggregated over two or more years of operation.

(4) Each Proponent shall measure the amount of energy saved or generated by each project according to subparagraph (A) or subparagraph (B) of this subdivision, as follows:

(A) (i) Adhering to the requirements of the International Performance Measurement and Verification Protocol, as revised in March 2002, DOE/GO-102002-1554 or the U.S. Environmental Protection Agency's Conservation Verification Protocol; and

(ii) Adhering to the measurement and verification provisions of New England Power Pool's or NEPOOL's Operating Procedure 18 ''Metering and Telemetering'' or other provisions acceptable to the commissioner; and

(iii) Making the normalization adjustments for energy savings in accordance with the International Performance Measurement and Verification Protocol, as revised in March 2002, DOE/GO-102002-1554; or

(B) Using any applicable measurement and verification protocols submitted to and approved by the commissioner.

(5) Nothing in this subsection shall preclude the commissioner from reducing the number of allowances allocated to a REP, EEP or QOP to account for:

(A) Any NO_x emissions associated with the operation of a REP, EEP or QOP;

(B) Uncertainty in the measurement or verification of the actual emissions reductions or energy savings achieved by a project; and

(C) Any other circumstances identified by the commissioner in writing and provided to the Proponent.

(6) The Proponent of a prospective project may apply to the commissioner to receive an estimate of the number of allowances that the commissioner may award from the EERESA to the prospective project pursuant to the requirements of this subsection after the prospective project has operated for one ozone season. The following considerations shall apply to such a prospective project:

(A) An application made pursuant to this subdivision shall be made on a form prescribed by the commissioner and shall include the following information:

(i) The Proponent's full name and business address,

(ii) The name and telephone number for a person to contact regarding the application,

(iii) A description of the project that includes the estimated completion date, the calculation of the electricity anticipated to be saved or supplied and an explanation of the planned electricity monitoring and verification method,

(iv) Any other information requested by the permitting authority, and

(v) A certification prepared and signed as required by section 22a-174-2a(a) of the Regulations of Connecticut State Agencies;

(B) After completing the construction or installation of a prospective project for which the commissioner has made an estimate of allowances that may be allocated from the EERESA pursuant to this subdivision and after operating the project for one ozone season, the Proponent may apply to receive an actual allocation of allowances from the EERESA according to the requirements of subdivision (3) of this subsection; and

(C) A determination by the commissioner concerning an application submitted pursuant to this subdivision is not a binding commitment to allocate the estimated number of allowances from the EERESA to the Proponent after such project initiates operation.

(7) In 2010, the commissioner may conduct a review of the Energy Efficiency and Renewable Energy Set-Aside Allocation program, including, but not limited to, the following factors:

(A) Success in facilitating energy efficiency and renewable energy projects;

(B) Impacts on CAIR NO_x Ozone Season allowance price and availability; and

(C) Appropriateness of the size of the EERESA.

(g) **CAIR NO_x Ozone Season allowance use.**

(1) A CAIR NO_x Ozone Season allowance reserved, allocated, banked or traded is reserved, allocated, banked or traded subject to all applicable legal requirements and limitations, including, but not limited to, the requirements of this section and the provisions of sections 22a-1, 22a-5, 22a-6, 22a-174 and 22a-174c of the Connecticut General Statutes.

(2) Except as provided in subdivision (3) of this subsection and subsection (i) of this section, CAIR NO_x Ozone Season allowances cannot be used to meet or exceed the limitations of any permit, order or other applicable requirement.

(3) The commissioner may allow the owner or operator of a CAIR NO_x Ozone Season unit to use CAIR NO_x Ozone Season allowances beyond those otherwise required for compliance with this section to comply with section 22a-174-22(e) of the Regulations of Connecticut State Agencies pursuant to the provisions of section 22a-174-22(j) of the Regulations of Connecticut State Agencies.

(4) Emission offsets required for new or modified major stationary sources of NO_x must be obtained in accordance with section 22a-174-3a of the Regulations of Connecticut State Agencies and are subject to the offset requirements of Section 173 of the Act. CAIR NO_x Ozone Season allowances may not be used as offsets, unless the commissioner permanently adjusts the state trading budget commensurate with the number of unused NO_x allowances approved for use as offsets and the owner or operator of a CAIR NO_x Ozone Season unit meets the following conditions:

(A) Reduces the emissions of such CAIR NO_x Ozone Season unit such that not all CAIR NO_x Ozone Season allowances allocated to that unit are used; and

(B) Satisfies the requirements of section 22a-174-3a(*l*)(5) of the Regulations of Connecticut State Agencies.

(5) If the owner or operator of a CAIR NO_x Ozone Season unit transfers emission reductions as offsets to sources of NO_x not participating in a CAIR NO_x Ozone Season allowance trading program administered by the Administrator under 40 CFR 51.123, such owner or operator shall surrender the CAIR NO_x Ozone Season allowances representing the emissions reductions in an amount equivalent to the emission reductions transferred off-budget.

(h) **Reserved**.

(i) **Allowance tracking and banking; monitoring; recordkeeping and reporting; and other requirements.**

(1) Each owner or operator and each designated representative of a CAIR NO_x Ozone Season unit that is subject to this section shall comply with each applicable requirement set forth in Table 22c-1 and incorporated by reference herein, as follows:

(A) Terms used in the incorporated sections of the CFR shall be defined as in 40 CFR 96.302, unless defined in subsection (a) of this section;

(B) To the extent that Table 22c-1 of this section refers to text in 40 CFR 96 that includes the Hg Budget Trading Program, CAIR SO_2 trading, CAIR NO_x Annual Trading Program, 40 CFR 96 subpart IIII and CAIR NO_x Ozone Season Opt-in Unit, such references are not incorporated by reference;

(C) To the extent the federal regulations incorporated into this section refer to CAIR NO_x Ozone Season Allowance Allocations, Subpart EEEE and 40 CFR 96.340-42, such references shall be replaced with subsections (c), (d), (e) or (f) of this section, as appropriate; and

(D) To the extent the federal regulations incorporated into this section refer to 40 CFR 96.304, such references shall be replaced with subsection (b) of this section.

(2) Additional reporting requirements. Each owner and operator of a CAIR NO_x Ozone Season unit shall report the information identified in this subdivision:

(A) By October 31 of each year, the owner or operator of each CAIR NO_x Ozone Season unit shall report to the commissioner the metered net electricity output (in MWh) and useful steam output (in mmBtu) for the facility at which the unit is located for that year's control period. If data for steam output is not available, the owner or operator may report heat input providing useful steam output as a surrogate for useful steam output; and

(B) The owner or operator of each New Unit operating in the first control period following the date of commencement of operation shall by July 1 of that first control period report to the commissioner an estimate of the total number of hours of operation for the control period. The owner or operator of each New Unit operating in the second and later control periods following the date of commencement of operation shall by July 1 of such second and later control periods report to the commissioner the number of hours the unit operated during the prior control period, rounded to the nearest whole hour by rounding down for decimals less than 0.5, and rounded up for decimals of 0.5 or greater.

(3) Monitoring and related reporting requirements. The requirements of 40 CFR 96.374(d)(2)(ii) shall only apply to those owners and operators of CAIR NO_x Ozone Season units that are not subject to an Acid Rain emissions limitation and are not monitoring NO_x emissions using a Continuous emission monitoring system (CEMS).

(4) Additional excess emissions requirements. The Administrator shall deduct, for excess emissions in the 2008 control period determined according to section 22a-174-22b of the Regulations of Connecticut State Agencies, CAIR NO_x Ozone Season allowances allocated for the 2009 control period in the manner specified in 40 CFR 96.354(d) for excess emissions in the 2009 control period and beyond.

(5) Copies of the relevant sections of 40 CFR 96 incorporated by reference in this section are available by contacting:

Connecticut Department of Environmental Protection
Bureau of Air Management
Planning and Standards Division
79 Elm Street
Hartford, Connecticut 06106
(860) 424-3027

Table 22c-1 40 Code of Federal Regulations Part 96 Provisions Incorporated by Reference as of October 19, 2007	
Subpart AAAA-CAIR NO_x Ozone Season Trading Program General Provisions	
Section 96.302	Definitions.
Section 96.303	Measurements, abbreviations, and acronyms.
Section 96.305	Retired unit exemption.
Section 96.306	Standard requirements.
Section 96.307	Computation of time.
Section 96.308	Appeal procedures.
Subpart BBBB-CAIR Designated Representative for CAIR NO_x Ozone Season Sources	
Section 96.310	Authorization and responsibilities of CAIR designated representative.
Section 96.311	Alternate CAIR designated representative.
Section 96.312	Changing CAIR designated representative and alternate CAIR designated representative; changes in owners and operators.
Section 96.313	Certificate of representation.
Section 96.314	Objections concerning CAIR designated representative.
Section 96.315	Delegation by CAIR designated representative and alternate CAIR designated representative.
Subpart CCCC-Permits	
Section 96.320	General CAIR NO_x Ozone Season Trading Program permit requirements.
Section 96.321	Submission of CAIR permit applications.
Section 96.322	Information requirements for CAIR permit applications.
Section 96.323	CAIR permit contents and term.
Section 96.324	CAIR permit revisions.
Subpart FFFF-CAIR NO_x Ozone Season Allowance Tracking System	
Section 96.351	Establishment of accounts.
Section 96.352	Responsibilities of CAIR authorized account representative.
Section 96.353	Recordation of CAIR NO_x Ozone Season allowance allocations.
Section 96.354	Compliance with CAIR NO_x emissions limitation.
Section 96.355	Banking.
Section 96.356	Account error.
Section 96.357	Closing of general accounts.
Subpart GGGG-CAIR NO_x Ozone Season Allowance Transfers	
Section 96.360	Submission of CAIR NO_x Ozone Season allowance transfers.
Section 96.361	EPA recordation.
Section 96.362	Notification.
Subpart HHHH-Monitoring and Reporting	
Section 96.370	General requirements.
Section 96.371	Initial certification and recertification procedures.

Section 96.372	Out of control periods.
Section 96.373	Notifications.
Section 96.374 (Except as provided in subsection (i)(3) of this section)	Recordkeeping and reporting.
Section 96.375	Petitions.

(Adopted effective September 4, 2007, February 1, 2010)

Sec. 22a-174-23. Control of odors

(a) (1) No person shall cause or permit the emission of any substance or combination of substances which creates or contributes to an odor, in the ambient air, that constitutes a nuisance.

(2) An odor constitutes a nuisance if present with such intensity, characteristics, frequency and duration that:

(A) It is, or can reasonably be expected to be, injurious to public health or welfare, or

(B) It unreasonably interferes with the enjoyment of life or the use of property, considering the character and degree of injury to, or interference with, the health, general welfare, property, or use of property of the people affected, and the location of the pollution source and character of the area or neighborhood affected. Whether the source of the emissions was present in the location first shall not be a consideration.

(3) Except as provided in subsection (b) of this section, in determining whether an odor constitutes a nuisance the commissioner shall review information gathered from any source of information, including but not limited to citizen complaints and site inspections or surveys.

(b) Odor in the ambient air shall be deemed to constitute a nuisance if a representative of the commissioner or at least fifty percent of any group of representatives of the commissioner determines, based upon at least three samples or observations in a one hour period, that after a dilution of seven parts clean air to one part sampled air, the odor is equal to or greater than the odor detection threshold. Each of the three or more samples or observations shall be separated by at least fifteen minutes. The burden of rebutting the presumption of nuisance created by this subsection shall be on the owner or operator of the source.

(c) Odor in the ambient air shall be deemed to constitute a nuisance if any substance or combination of substances is present at a concentration in excess of any concentration stated in Table 23-1 of this section. The burden of rebutting the presumption of nuisance created by this subsection shall be on the owner or operator of the source.

(d) The commissioner may determine that an ambient odor which does not exceed the limits set forth in subsections (b) or (c) of this section nevertheless constitutes a violation of subsection (a) of this section.

(e) If the commissioner finds that a violation of this section has occurred and reasonably suspects that a certain source has caused or contributed to such violation, the commissioner may issue an order requiring the owner and/or operator of such source to investigate whether it has caused or contributed to such violation. The commissioner may reasonably suspect that a source has caused or contributed to a violation based upon one (1) or more of the following: citizen complaints; comparisons of odors upwind and downwind of the source; material handling and storage practices; methods of operation; site inspections; surveys; information gathered from

any other source; or actual or estimated stack emissions, fugitive emissions or ambient pollutant concentrations.

(f) The commissioner may use air quality modeling techniques to calculate ambient pollutant concentrations. The commissioner shall not use air quality modeling results as the sole basis for finding a violation of this section, unless the commissioner has received ten or more written complaints within ninety (90) consecutive days from separate households.

(g) Any person who is required to undertake an investigation or remediation pursuant to this section shall assure that all samples and measurements taken in any investigation and remediation are representative of the activity required to be sampled. In calculating ambient air quality impacts, such person shall use applicable air quality models, data bases or other techniques approved in writing by the commissioner for the subject source and any other source which is included in the analysis.

(h) Notwithstanding the provisions of section 22a-174-3a(c)(2) of the Regulations of Connecticut State Agencies, in acting on an application for a permit, the commissioner need not perform or review modeling to determine that a proposed source will operate in compliance with subsection (c) of this section.

(i) Nothing in this section shall permit emission of any pollutant in violation of any other section, and compliance with any other section shall not constitute compliance with this section.

(j) An argicultural or farming operation shall be exempt from the provisions of this section to the extent provided by Section 19a-341 of the General Statutes.

(k) The provisions of this section shall not apply to mobile sources or structures which are occupied solely as a dwelling and contain six or fewer dwelling units.

Table 23-1

Odor Limit Value in parts per million, fifteen-minute average

Compound	*Concentration*
Chlorine	0.0240
Ethyl acrylate	0.00037
Ethyl mercaptan	0.00040
Formaldehyde	2.49
Hydrogen sulfide	0.0045
Methyl ethyl ketone	17.0
Methyl mercaptan	0.0010
Methyl methacrylate	0.34
Perchloroethylene	71.0
Phenol	0.12
Styrere	0.15
Toluene	11.0

(Effective October 1, 1990; amended April 4, 2006)

Sec. 22a-174-24. Connecticut primary and secondary standards

(a) **Definitions.**

(1) ''Ambient air'' means that portion of the atmosphere, external to buildings, to which the general public has access.

(2) ''Reference method'' means a method of sampling and analyzing for an air pollutant, as described in Title 40 Code of Federal Regulations part 50, as from time to time may be amended.

(3) ''Equivalent method'' means any method of sampling and analyzing for an air pollutant that has been designated in accordance with Title 40 of Federal Regulations part 53, as from time to time may be amended.

(4) ''Acceptable method'' means a reference method, an equivalent method, or any other method determined by the Commissioner.

(b) The concentration of pollutants in the ambient air, as measured by an acceptable method, shall conform with levels specified below as the applicable air quality standards for these substances throughout Connecticut. No person shall operate a source, which has a significant impact on air quality as listed in Table 3a(i)-1 set forth in section 22a-174-3a(i)(1) of the Regulations of Connecticut State Agencies, in such a manner as to cause or contribute to a violation of an ambient air quality standard listed in section 22a-174-24.

(c) **Reference conditions.** All measurements of air quality are corrected to a reference temperature of twenty (20) degrees C. and to a reference pressure of 760 millimeters of mercury (1,013.2 millibars or 29.92 inches of mercury).

(d) **Connecticut primary ambient air quality standards for sulfur oxides (sulfur dioxide).** The Connecticut primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide, are:

(1) 80 micrograms per cubic meter (0.03 ppm)—annual arithmetic mean.

(2) 365 micrograms per cubic meter (0.14 ppm)—maximum 24-hour concentration not to be exceeded more than once per year.

(e) **Connecticut secondary ambient air quality standards for sulfur oxides (sulfur dioxide).** The Connecticut secondary ambient air quality standard for sulfur oxides, measured as sulfur dioxide, is:

(1) 1,300 micrograms per cubic meter (0.5 ppm)—maximum 3-hour concentration not to be exceeded more than once per year.

(2) 260 micrograms per cubic meter (0.1 ppm)—maximum 24-hour concentration not to be exceeded more than once per year.

(3) 1,300 micrograms per cubic meter (0.5 ppm)—maximum 3-hour concentration not to be exceeded more than once per year.

(f) **Connecticut primary ambient air quality standards for particulate matter.**

(1) The level of the Connecticut primary 24-hour ambient air quality standard for particulate matter, measured as PM_{10}, is 150 micrograms per cubic meter (ug/m^3), 24-hour average concentration. The standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 ug/m^3, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than one.

(2) The level of the Connecticut primary annual standard for particulate matter, measured as PM_{10}, is 50 micrograms per cubic meter (ug/m^3), annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than 50 ug/m^3.

(g) **Connecticut secondary ambient air quality standards for particulate matter**

(1) The level of the Connecticut secondary 24-hour ambient air quality standard for particulate matter, measured as PM_{10}, is 150 micrograms per cubic meter (ug/m^3), 24-hour average concentration. The standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150

ug/m^3, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than one.

(2) The level of the Connecticut secondary annual standard for particulate matter, measured as PM_{10}, is 50 micrograms per cubic meter (ug/m^3), annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than 50 ug/m^3.

(h) **Connecticut primary and secondary ambient air quality standards for carbon monoxide.** The Connecticut primary and secondary ambient air quality standards for carbon monoxide are:

(1) 10 milligrams per cubic meter (9 ppm)—maximum 8-hour concentration not to be exceeded more than once per year.

(2) 40 milligrams per cubic meter (35 ppm)—maximum 1-hour concentration not to be exceeded more than once per year.

(i) **Connecticut primary and secondary ambient air quality standards for ozone.**

(1) **Connecticut 8-hour primary and secondary ambient air quality standards for ozone.**

(A) The level of the Connecticut 8-hour primary and secondary ambient air quality standards for ozone is 0.08 parts per million, daily maximum 8-hour average, measured by a reference method based on 40 CFR 50, Appendix D.

(B) The Connecticut 8-hour primary and secondary ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 parts per million, as determined in accordance with 40 CFR 50, Appendix I.

(2) **Connecticut 1-hour primary and secondary ambient air quality standards for ozone.**

(A) The level of the Connecticut 1-hour primary and secondary ambient air quality standards for ozone is 0.12 parts per million (235 mg/m^3), measured by a reference method based on 40 CFR 50, Appendix D.

(B) The Connecticut 1-hour primary and secondary ambient air quality standards are met when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 parts per million is equal to or less than one day, as determined by 40 CFR 50, Appendix H.

(j) **Connecticut primary and secondary ambient air quality standards for hydrocarbons.** The hydrocarbons standard is for use as a guide in achieving oxidant standards. The Connecticut pimary and secondary ambient air quality standard for hydrocarbons is: 160 micrograms per cubic meter (0.24 ppm)—maximum 3-hour concentration (6 am to 9 am) not to be exceeded more than once per year.

(k) **Connecticut primary and secondary ambient air quality standard for nitrogen dioxide.** The Connecticut primary and secondary ambient air quality standard for nitrogen dioxide is: 100 micrograms per cubic meter (0.05 ppm)—annual arithmetic mean.

(*l*) **Connecticut primary and secondary ambient air standards for lead.** The Connecticut primary and secondary ambient air quality standard for lead and its compounds, measured as elemental lead is: 1.5 micrograms per cubic meter, maximum arithmetic mean averaged over three consecutive calendar months.

(m) **Connecticut primary ambient air quality standard for dioxin emissions.** The Connecticut primary ambient air quality standard for dioxin emissions is 1.0

picograms per cubic meter annual average. For the purposes of determining compliance with this standard the Commissioner may use a concentration of 7.0 picograms per cubic meter 8-hour average. Within three years of the effective date of this subsection, the Commissioner shall refer this standard for review and comment by the hazardous air pollutant advisory panel.

(Effective July 7, 1993; amended April 4, 2006)

Sec. 22a-174-25.

Repealed, February 1, 2010.

Sec. 22a-174-26. Fees

(a) **Definitions.** For the purposes of this section:

(1) ''annual fee'' means the fee required by section 22a-174a of the General Statutes.

(2) ''applicant'' means the person filing an application.

(3) ''application'' means an application for a permit, or for renewal or modification thereof, under section 22a-174 of the Connecticut General Statutes.

(4) ''application fee'' means the fee required by subsection (b) of this section.

(5) ''modification'' means a modification as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(6) ''permit fee'' means the fee required by subsection (c)(1) of this section.

(7) ''PTE'' means ''potential to emit'' as defined in section 22a-174-1(86) of the Regulations of Connecticut State Agencies.

(8) ''tentative determination'' means a tentative determination issued by the commissioner under section 22a-6h of the Connecticut General Statutes.

(9) ''TPY'' means tons per year.

(10) The date of issuance of any notice or other document by the commissioner is the date of mailing or hand delivery, whichever is earlier.

(b) **Application fees.**

(1) Any person who is required to file an application under section 22a-174-3a or section 22a-174-19 of the Regulations of Connecticut State Agencies shall submit with such application an application fee of seven hundred and fifty dollars ($750.00).

(2) In addition to the application fee submitted under subdivision (1) of this subsection, each person for whom the commissioner reviews an application for a permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies, shall pay an additional application fee of one thousand five hundred dollars ($1,500.00) for:

(A) Each best available control technology (BACT) review required under section 22a-174-3a of the Regulations of Connecticut State Agencies for a stationary source or modification thereof, unless the stationary source or modification will have potential emissions of less than fifty (50) tons per year of each pollutant for which the permit is required or the impact on ambient air quality of each of these pollutant emissions is not significant as listed in Table 3a(i)-1 set forth in section 22a-174-3a(i)(1) of the Regulations of Connecticut State Agencies; and

(B) Each lowest achievable emission rate (LAER) review required under section 22a-174-3a of the Regulations of Connecticut State Agencies.

(3) Notwithstanding subdivision (1) of this subsection, the fees for an application to change the fuel used to natural gas or liquefied propane gas, or to implement a process that will allow the use of A cleaner fuel shall be three hundred and seventy-five dollars ($375.00).

(4) There is no fee to correct a clerical error in a permit made by the commissioner.

(5) The commissioner shall apply the application fee under subdivision (1) or (3) of this subsection to any permit fee required by subsection (c) of this section.

(6) Notwithstanding the prior payment of an application fee, an applicant shall pay another application fee in accordance with subdivisions (1), (2) and (3) of this subsection under either of the following circumstances:

(A) After the commissioner has issued his tentative determination on the subject application but before he has taken final action thereon, the applicant revises the application so as to reflect an anticipated increase in emissions; or

(B) After the commissioner has issued his tentative determination on the subject application but before he has taken final action thereon, the applicant revises the application so as to reflect a change in process.

(c) **Permit fees.**

(1) Each person to whom the commissioner issues a permit, or a modification or renewal thereto, under section 22a-174-3a, section 22a-174-2a and section 22a-174-19 of the Regulations of Connecticut State Agencies shall pay a permit fee as prescribed in the fee schedule in subdivision (2) of this subsection.

(2) The fee schedule is set forth in Table 26-1.

TABLE 26-1 PERMIT FEE SCHEDULE			
	REGULATION UNDER WHICH PERMIT IS ISSUED	**MAJOR SOURCE (PTE)**	**LESS THAN MAJOR SOURCE (PTE)**
New major stationary source	22a-174-3a(a)(1)(A)	$6,000	NA
Major modification	22a-174-3a(a)(1)(B)	$6,000	NA
New or reconstructed major source of hazardous air pollutants	22a-174-3a(a)(1)(C) and (m)	$6,000	NA
New emission unit with potential emissions of fifteen (15) tons or more per year of any individual air pollutant	22a-174-3a(a)(1)(D)	NA	$3,000
Modification to an existing emission unit which increases potential emissions of any individual air pollutant from such unit by fifteen (15) tons or more per year	22a-174-3a(a)(1)(E)	NA	$3,000
Stationary source modification that becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable	22a-174-3a(a)(1)(F)	$6,000	NA
Limitation which was established after August 7, 1980 on the capacity of the source or modification otherwise to emit a pollutant			
New source review non-minor permit modification	22a-174-2a(d)	$3,000	$1,500
New source review minor permit modification	22a-174-2a(e)	$3,000	$1,500
Permit revision	22a-174-2a(f) (2)(B) to (G), inclusive	$1,500	$1,500
Permit renewal	22a-174-2a (i)	$3,000	$3,000
Permit for use of solid fuel	22a-174-(19)(a)(2) (i)	$6,000	$3,000
Permit for air pollution control energy trade	22a-174-(19)(a)(3)	$15,000	$7,500

(3) There is no fee for any permit issued to a municipality or to an agency of the state or political or administrative subdivision thereof under section 22a-174-100 of the Regulations of Connecticut State Agencies.

(4) There is no fee for any certificate required under section 22a-174-17 of the Regulations of Connecticut State Agencies.

(5) There is no fee, other than the fees under subsections (d) and (e) of this section, payable to the commissioner by the owner or operator of a Title V source to apply for, revise, modify or renew a Title V permit issued under section 22a-174-33 of the Regulations of Connecticut State Agencies.

(6) Each person who pays to the commissioner a license transfer fee pursuant to subsection (e) of this section shall not be subject to a permit revision fee pursuant

to this subsection provided that the transfer of ownership and related administrative information are the only changes being proposed to the subject permit.

(d) **Emission fees.**

(1) For the purposes of this subsection, the following definitions shall apply:

''Title V source'' means:

(A) Any stationary source, or any group of stationary sources, where such source is located on one or more contiguous or adjacent properties, that is under common control of the same person, or persons under common control, and such source or sources have potential emissions, including fugitive emissions to the extent quantifiable, of, In the aggregate, ten (10) tons or more per year of any hazardous air pollutant which has been listed pursuant to section 112 (b) of the Clean Air Act, or twenty-five (25) tons or more per year of any combination of such hazardous air pollutants; or

(B) Any stationary source, or any group of stationary sources, where such source is located on one or more contiguous or adjacent properties, that is under common control of the same person, or persons under common control, and such source or sources belong to the same two digit Standard Industrial Classification code, as published by the United States Office of Management and Budget (OMB) in the Standard Industrial Classification Manual of 1987, and such source or sources have potential emissions, including fugitive emissions to the extent quantifiable, of:

(i) One hundred (100) tons or more per year of any air pollutant;

(ii) Fifty (50) tons or more per year of any volatile organic compounds or nitrogen oxides in a serious ozone nonattainment area; or

(iii) Twenty-five (25) tons or more per year of volatile organic compounds or nitrogen oxides in a severe ozone nonattainment area.

''1990 inventory'' means the inventory submitted by the Department to the U.S. Environmental Protection Agency on January 13, 1994 which for stationary source is emissions of 133,665 tons per year for 1990.

(2) The owner or operator of a Title V source shall pay an emission fee each year to the Department. The emission fee paid shall be the amount calculated under subdivision (4) of this subsection, unless the provisions of subdivision (6) of this subsection apply, in which case the emission fee paid shall be the amount specified in subdivision (6) of this subsection. Commencing July 1, 1995, payment to the Department shall be due by July 1 each year, based on the emissions during the previous calendar year.

(3) The emission fee shall be based on emissions of the following:

(A) Nitrogen oxides;

(B) Any volatile organic compound;

(C) Any pollutant for which an ambient air quality standard has been listed in subsections (d) to (*l*), inclusive, of section 22a-174-24 of the Regulations of Connecticut State Agencies;

(D) Any pollutant that is subject to any standard promulgated under section 111 of the Clean Air Act;

(E) Any Class I or II substance, listed in 42 U.S.C. 7671a, subject to a standard promulgated under or established by Title VI of the Clean Air Act; and

(F) Any hazardous air pollutant subject to a standard promulgated or other requirement established under section 112 of the Clean Air Act (42 U.S.C. 7412).

(4) Emission fee determination. The emission fee shall be based upon the actual emissions of all regulated air pollutants as identified in subdivision (3) of this subsection, from any emission units at the source according to the following equation:

$$\text{emission fee} = (A) \times (B) \times (C)$$

Where:

(A) Is the Total Actual Premise Emissions, which is the premise's actual emissions of the pollutants specified in subdivision (3) of this subsection from all emitting units located at the premise as reported in the emissions inventory for the previous calendar year which is on file with the Department. The sum of the Total Actual Premise Emissions shall be raised to the next whole ton;

(B) Is the per ton fee, which is equal to twenty-five dollars ($25.00) per ton in 1989 dollars multiplied by the ratio of the Consumer Price Index for all-urban consumers published by the United States Department of Labor, as of August 31 of the previous calendar year, to the Consumer Price Index for August 1989; and

(C) Is the Inventory Stabilization Factor, which is a value equal to the total actual emissions of 133,665 tons per year from stationary sources in the 1990 Inventory divided by the total statewide stationary source actual emissions from the previous calendar year. The quotient shall be rounded to the second decimal place. If the Inventory Stabilization Factor is less than one (1.00), one (1.00) shall be used as the Inventory Stabilization Factor. The commissioner shall, thirty days prior to application of the Inventory Stabilization Factor, file with the Secretary of the Office of Policy and Management a report describing the calculation of the Inventory Stabilization Factor with relevant supporting documentation. Such report shall also describe expenditures of the previous year's emission based fees collected pursuant to this subsection.

(5) The commissioner may reduce the Inventory Stabilization Factor set forth in subdivision (4)(C) of this subsection applicable to the prior calendar year emissions, if the commissioner finds that the Air Emissions Permit Operating Fee account balance, by itself, will be sufficient on or about July 1st to cover two years of Title V program expenses. The Inventory Stabilization Factor shall not be reduced to less than one (1.00). The commissioner shall not adjust the Inventory Stabilization Factor in such a manner as to collect fees that will result in the balance in the Air Emissions Permit Operating Fee account being insufficient to cover two years of Title V program expenses. The determination of what constitutes a Title V program expense under this subdivision shall be in the sole discretion of the commissioner and in accordance with section 502(b)(3) of the Clean Air Act.

(6) Notwithstanding subdivision (4) of this subsection, the emission fee shall be:

(A) Effective July 1, 2004, one thousand dollars ($1,000.00) for each Title V source for which the emission fee calculated under subdivision (4) of this subsection was less than one thousand dollars ($1,000.00). Effective July 1, 2005, two thousand five hundred dollars ($2,500.00) for each Title V source for which the emission fee calculated under subdivision (4) of this subsection was less than two thousand five hundred dollars ($2,500.00). Effective July 1, 2006, five thousand dollars ($5,000.00) for each Title V source for which the emission fee calculated under subdivision (4) of this subsection was less than five thousand dollars ($5,000.00); and

(B) Five hundred thousand dollars ($500,000.00), adjusted for inflation from August 31, 1989, for each Title V source for which the emission fee calculated under subdivision (4) of this subsection was more than five hundred thousand dollars ($500,000.00), adjusted for inflation from August 31, 1989. ''Adjusted for inflation'' for the purposes of this subparagraph means, an increase to the emission fee by multiplying such fee by the ratio of the Consumer Price Index for all urban consumers published by the United States Department of Labor as of August 31 of the previous calendar year, to the Consumer Price Index for August 1989.

(7) Late fee. A late fee of ten percent (10%) of the emission fee or fifty dollars ($50), whichever is greater, shall be charged, in addition to any other fee required

by this subsection, if an owner or operator of a Title V source fails to submit the required emission fee when due. The owner or operator of such Title V source shall pay an additional one and one quarter percent (1.25%) per month of the amount of all emission fees required by this subsection which remain unpaid after the first day of each month. This subdivision shall not prevent the commissioner from pursuing other remedies available by statute or regulation.

(8) Municipal emission fees. Any emission fee charged to a municipality pursuant to this subsection shall be fifty percent (50%) of the emission fee owed pursuant to subdivisions (4) or (6) of this subsection, whichever subdivision is applicable.

(9) An emission fee required under this subsection shall be paid in an amount rounded to the nearet whole dollar.

(e) **Transfer fee.** Each person registering a proposed transfer of a license with the commissioner under section 22a-6o of the Connecticut General Statutes shall submit with such registration a transfer fee of seven hundred and fifty dollars ($750.00).

(f) **General permit fee.** Each person filing a registration for approval to operate under a general permit issued under subsection (l) of section 22a-174 of the Connecticut General Statutes shall submit with such registration the fee required by section 22a-6f(b) of the Connecticut General Statutes.

(g) **Annual inspection fees.**

There is no fee for any annual inspection conducted under section 22a-174a of the Connecticut General Statutes.

(h) **Emission test fees.** In addition to any other fee required by this section, the owner or operator of a stationary source who is required by any statute, regulation, permit or order administered or issued by the commissioner to conduct an emission test or to install or operate a continuous emission monitor shall pay three-hundred and seventy-five dollars ($375.00) to the commissioner per day or part thereof for each Department employee who conducts or observes such test or the installation of such continuous emission monitor; provided that if such owner or operator is subject to section 22a-232 of the Connecticut General Statutes, he shall not be required to pay the fee established by this subsection.

(i) **Payment of fees.**

(1) Any fee required under this section shall be paid by check or money order payable to the Department of Environmental Protection, which shall state on its face, for an application fee, ''Air Management Application Fee'', for an emission fee, ''Air Management Emission Fee'', and for any other fee, ''Air Management Fee.''

(2) Except as otherwise provided by this section, any fee required by this section shall be submitted within the time specified by the commissioner. If neither this section nor the commissioner specifies a time for submitting payment, payment shall be due within 30 days of written notice by the commissioner that such fee is required.

(j) **Failure to pay fee.** The commissioner shall not process an application for a permit or other authorization under section 22a-174 of the Connecticut General Statutes unless all fees required by this section have been paid in full.

(k) **Late fee.** Except as otherwise provided in this section, an applicant or permittee who fails to pay when due any fee required by this section shall pay an additional five percent (5%) of the amount of such fee for each month or part thereof that such fee is overdue.

(*l*) **Municipal fees.** In accordance with subsection (i) of section 22a-174 of the Connecticut General Statutes, any fee under this section due from a municipality shall be reduced by fifty percent (50%).

(m) **Refunds.**

(1) If (A) the commissioner determines that the permit or other authorization or approval sought by an application is not required by law, or an applicant revises a pending application so as to decrease the permit fee that would otherwise be required by this section if the permit sought by such applicant were granted, and (B) the commissioner has not yet published his tentative determination on such application, the commissioner shall retain one half of the application fee or general permit fee paid and shall refund to the applicant the balance thereof.

(2) If an application fee is submitted with an application for an individual permit under section 22a-174 of the Connecticut General Statutes, and the commissioner determines (A) that a general permit has been issued under subsection (l) of such section with respect to the activity for which such application seeks a permit, and (B) that the general permit fee for authorization under such general permit is less than the application fee paid with the individual permit application, the commissioner shall deduct the general permit fee from the application fee paid, retain such deducted amount, and refund the remainder to the applicant.

(3) If, immediately prior to permit issuance, all fees paid by an applicant exceed the sum of all fees required under this section, the commissioner shall refund the excess payment to the applicant.

(4) If the owner or operator of a Title V source pays an emission fee under subsection (d) of this section in excess of the fee actually due, the commissioner shall refund to such owner or operator the portion of the fee paid which is excessive.

(5) The owner or operator of a source subject to the emission fee in subsection (d) of this section may dispute the amount of such fee only by submitting, in writing, to the commissioner an explanation of the reason for the dispute. If the commissioner determines that he erroneously calculated emissions from the subject source, he shall refund to such owner or operator the excess amount, provided such owner or operator timely paid the entire fee assessed under subsection (d) of this section and submitted such written explanation prior to or simultaneously with such payment.

(6) There shall be no refunds other than as specified in this subsection.

(Effective January 23, 1997; amended September 30, 2002, May 26, 2004)

Sec. 22a-174-27. Emission standards and on-board diagnostic II test requirements for periodic motor vehicle inspection and maintenance

(a) **Applicability.**

This section shall apply to any owner or operator of a 1979 and later model year motor vehicle that is not an antique, rare or special interest motor vehicle as defined in section 14-1 of the Connecticut general statutes. This section shall not apply to motor vehicles that are exempt from the periodic air pollution control system inspection and maintenance requirements pursuant to subsection (c) of section l4-l64c of the Connecticut general statutes.

(b) **Definitions.** As used in this section:

(l) ''ASM 2525'' or ''Acceleration Simulation Mode Test'' means an emissions test to analyze exhaust emissions of CO, NO, and HC performed at a steady state of twenty-five (25) miles per hour (mph) and utilizing a dynamometer load set to simulate twenty-five (25%) of the power required to accelerate the particular vehicle being tested at 3.3 mph per second until a speed of twenty-five (25) mph is attained;

(2) ''CO'' means carbon monoxide;

(3) ''Gross Vehicle Weight Rating'' or ''GVWR'' means the value specified by the manufacturer as the maximum loaded weight of a single or a combination (articulated) vehicle, or its registered gross weight, whichever is greater. The GVWR

of a combination (articulated) vehicle commonly referred to as the ''Gross Combination Weight Rating'' or GCWR is the GVWR of the power unit plus the GVWR of the towed unit or units;

(4) ''HC'' means hydrocarbon;

(5) ''Heavy-duty gasoline powered vehicle'' means any motor vehicle fueled by gasoline that is rated at greater than eight thousand five hundred (8500) pounds GVWR and less than or equal to ten thousand (10,000) pounds GVWR;

(6) ''Light-duty truck'' or ''LDT'' means a motor vehicle rated at eight thousand five hundred (8500) pounds GVWR or less and is designed:

(A) To transport property or ten (10) or more persons, not including the operator; or

(B) With features enabling off-street or off-highway operation and use;

(7) ''Light-duty vehicle'' or ''LDV'' means a motor vehicle that is designed:

(A) To carry not more than ten (10) persons, including the operator; and

(B) To transport persons and their property with at least fifty percent (50%) of the total area enclosed by the outermost body contour lines, excluding the area enclosing the engine;

(8) ''Loaded opacity test procedure'' means an analysis of exhaust opacity measured by an opacity meter and utilizing a dynamometer load;

(9) ''Loaded vehicle weight'' or ''LVW'' means vehicle curb weight plus three hundred (300) pounds;

(10) ''Model year'' means a motor vehicle manufacturer's annual production period that includes January 1 of such calendar year or, if the manufacturer has no annual production period, the production period that includes January 1 of such year;

(11) ''Modified snap-acceleration smoke opacity test procedure'' means an analysis of exhaust opacity in accordance with a variant of the ''snap-acceleration smoke opacity test'' defined in section 14-164i-1 of the Regulations of Connecticut State Agencies;

(12) ''NO'' means nitric oxide;

(13) ''On-board diagnostic II system" or ''OBD II system'' means a computerized self diagnostic system in a LDV or LDT that registers faults indicating malfunctions and deteriorations of the LDV's OR LDT's exhaust and evaporative emission control components;

(14) ''Pre-conditioned two speed idle test procedure'' means an analysis of exhaust emissions concentrations of CO, in percent by volume (VOL. %), and HC, in parts per million (ppm); and

(15) ''Vehicle curb weight'' is defined as in 40 CFR 86.082-2.

(c) **Emission standards.**

(1) Pre-conditioned two speed idle test standards shall be as follows:

(A) maximum allowable emissions for any light-duty truck or light-duty vehicle subject to a pre-conditioned two speed idle test procedure administered by the Commissioner of Motor Vehicles or his designee shall be as identified per vehicle model year in table 27-1; and

Table 27-1. Pre-conditioned Two Speed Idle Test Standards for Light-duty Trucks and Light-duty Vehicles

Vehicle Model Year	CO (Vol. %)	HC (ppm)
1979	3.00	600
1980	3.00	600
1981 and later	1.20	220

(B) Maximum allowable emissions for any heavy-duty gasoline powered vehicle subject to a pre-conditioned two speed idle test procedure administered by the Commissioner of Motor Vehicles or his designee shall be as identified per vehicle model year in table 27-2.

Table 27-2. Pre-conditioned Two Speed Idle Test Standards for Heavy-duty Gasoline Powered Vehicles

Vehicle Model Year	CO (vol. %)	HC (ppm)
1980 and earlier	3.0	600
1981 through 1987	1.6	450
1988 and later	1.6	300

(2) ASM 2525 exhaust emission standards. Maximum allowable emissions for any vehicle subject to an ASM 2525 exhaust emission test administered by the Commissioner of Motor Vehicles or a designee of the Commissioner of Motor Vehicles shall be as published by the United States Environmental Protection Agency in subdivisions (a)(2) and (a)(3) of section 85.1 of the ''Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications,'' Final Technical Guidance, EPA420-B-03-008 (October 2003).

(3) Loaded opacity test standards. Maximum allowable visible emissions for diesel powered LDVs and LDTs of model years 1979 and later subject to a loaded opacity test procedure administered by the Commissioner of Motor Vehicles or his designee, shall be twenty percent (20%) particulate opacity.

(4) Modified snap-acceleration smoke opacity test standards. Maximum allowable visible emissions for any diesel powered vehicle subject to a modified snap-acceleration smoke opacity test procedure administered by the Commissioner of Motor Vehicles or his designee shall be as specified in section 14-164i-2 of the Regulations of Connecticut State Agencies.

(d) **Undetermined GVWR.** Where the gross vehicle weight rating cannot be determined, the emission standard for LDVs shall apply.

(e) **Reserved.**

(f) **Alteration or replacement of vehicle engine.**

(1) Any vehicle with an engine other than the one originally installed by the manufacturer or an identical replacement of such engine shall be subject to the test procedures and standards for the chassis type and model year of the vehicle.

(2) Any vehicle that is re-engineered from an internal combustion gasoline engine to another combustion or fuel type, shall be subject to the test procedures and standards for a gasoline powered vehicle.

(g) **On-board diagnostic II system test procedures.**

The test sequence for any inspection of OBD II systems on model year 1996 and newer LDV's and LDT's administered by the Commissioner of Motor Vehicles or his designee shall meet the requirements of 40 CFR 51 and 40 CFR 85 and shall include all procedures set forth in 40 CFR 85.2222.

(Effective July 26, 1995, amended March 26, 1998, August 21, 2000, August 25, 2004, August 10, 2009)

Sec. 22a-174-28. Oxygenated gasoline

(a) **Definitions**.

(1) ''ASTM'' means the American Society for Testing and Materials.

(2) ''Carrier'' means any person who transports, stores or causes the transportation or storage of gasoline at any point in the gasoline distribution network, without taking title to or otherwise having ownership of the gasoline and without altering the quality or quantity of the gasoline.

(3) ''Central Control Area'' means the cities and towns within the Hartford Consolidated Metropolitan Statistical Area. These towns are: Andover, Avon, Barkhamsted, Berlin, Bloomfield, Bolton, Bristol, Burlington, Canton, Colchester, Columbia, Coventry, Cromwell, Durham, East Granby, East Haddam, East Hampton, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Haddam, Hartford, Hebron, Manchester, Marlborough, Middlefield, Middletown, New Britain, New Hartford, Newington, Plainville, Plymouth, Portland, Rocky Hill, Simsbury, Somers, South Windsor, Southington, Stafford, Suffield, Tolland, Vernon, West Hartford, Wethersfield, Willington, Windsor and Windsor Locks.

(4) ''Control Area'' means either the Central Control Area or the Southwestern Control Area.

(5) ''Control Period'' means the period from November 1 to the last day of February for the Central Control Area and the Southwestern Control Area if a violation of the ambient air quality standard for carbon monoxide, as listed in subsection 22a-174-24(h) of the Regulations of Connecticut State Agencies as determined in accordance with the procedures specified in Title 40 Code of Federal Regulations Part 50, occurs within such Control Area after November 1, 1998. If such violation occurs between December 1 and September 1, the Control Period for the Control Area in which such violation occurred begins the following November. If such violation occurs between September 1 and December 1, the Control Period for the Control Area in which such violation occurred begins sixty (60) days after such violation for the initial Control Period and begins November 1 for each succeeding year.

(6) ''Distributor'' means any person who transports or stores or causes the transportation or storage of gasoline at any point between any gasoline refinery or importer's facility and any retail outlet or wholesale purchaser-consumer's facility.

(7) ''Gasoline'' means any fuel sold for use in motor vehicles and motor vehicle engines, and commonly or commercially known or sold as gasoline.

(8) ''Importer'' means a person who imports gasoline or gasoline blending stocks from a foreign country into the United States.

(9) ''Oxygenate'' means any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Lawful use of any combinations of these substances requires that they be ''Substantially Similar'' under section 211(f)(1) of the Clean Air Act, or be permitted under a waiver granted by the Administrator under the authority of section 211(f)(4) of the Clean Air Act.

(10) ''Oxygenated gasoline'' means a gasoline with an oxygen content of at least two and seven tenths percent (2.7%) but no more than three and five tenths percent (3.5%) of oxygen by weight.

(11) ''Oxygen content'' means the percentage of oxygen by weight contained in gasoline, based upon its percentage oxygenate by volume, excluding denaturants and other non-oxygen containing components.

(12) ''Refinery'' means a plant at which gasoline is produced.

(13) ''Retail outlet'' means any establishment at which gasoline is sold, offered for sale or dispensed to the ultimate consumer for use in motor vehicles.

(14) ''Retailer'' means any person who owns, leases, operates, controls or supervises a retail outlet.

(15) ''Southwestern Control Area'' means the cities and towns within the Connecticut portion of the New Jersey - New York - Connecticut Consolidated Metropolitan Statistical Area. These towns are: Ansonia; Beacon Falls; Bethel; Bridgeport; Bridgewater; Brookfield; Danbury; Darien; Derby; Easton; Fairfield; Greenwich; Milford; Monroe; New Canaan; New Fairfield; New Milford; Newtown; Norwalk; Oxford; Redding; Ridgefield; Seymour; Shelton; Sherman; Stamford; Stratford; Trumbull; Weston; Westport; and Wilton.

(16) ''Terminal'' means a facility at which gasoline is sold or dispensed into trucks for transportation to a retailer or wholesale purchaser-consumer.

(17) ''Wholesale purchaser-consumer'' means any person who:

(A) is an ultimate consumer of gasoline;

(B) purchased or obtains such gasoline from a distributor or carrier; and

(C) receives such gasoline into a storage tank with a capacity of 550 gallons or more which is substantially under the control of such person.

(b) **Oxygen content standards.**

(1) No distributor or carrier shall provide, deliver, offer for sale, sell, or exchange in trade to any retailer or wholesale purchaser-consumer for use in a Control Area any gasoline which is not oxygenated gasoline during the Control Period for such Control Area except where an emergency exemption has been issued by the Commissioner pursuant to subsection (g) of this section.

(2) No retailer or wholesale purchaser-consumer located in a Control Area shall accept delivery, store, offer for sale or exchange in trade any gasoline which is not oxygenated gasoline during the Control Period for such Control Area.

(c) **Procedures for sampling, testing, and calculating oxygen content.**

(1) Any person who determines the oxygen content by weight of gasoline shall use the values listed in Table 28-1 of this subsection and the procedures listed in subdivisions (c)(2) through (c)(4) of this subsection. All volume measures shall be adjusted to sixty (60) degrees Fahrenheit.

(2) Any person who determines the oxygen content by weight of gasoline shall obtain a representative sample in accordance with EPA's sampling procedures as detailed in Title 40 Code of Federal Regulations Part 80, Appendix D.

(3) Any person who determines the oxygen content by weight of gasoline shall determine the mass concentration of each oxygenate in the sample by one of the following test methods:

(A) ASTM Method 4815-89 (ASTM standard test method for determination of C_1 TO C_4 alcohols and MTBE in gasoline by gas chromatography); or

(B) Appendix C to EPA's Supplemental Notice of Proposed Guidelines for Oxygenated Gasoline Credit Programs under Section 211(m) of the Clean Air Act as amended, printed in the February 5, 1992 Federal Register (57 FR 4444); and

(4) Any person who determines the oxygen content by weight of gasoline shall calculate the oxygen content by weight by using the oxygen content conversion procedures from EPA's Supplemental Notice of Proposed Guidelines for Oxygenated Gasoline Credit Programs under Section 211(m) of the Clean Air Act as amended, printed in the February 5, 1992 Federal Register (57 FR 4425).

TABLE 28-1

Oxygenate	Percent (%) Weight of Oxygen	Specific Gravity
methyl alcohol	0.4993	0.7963
ethyl alcohol	0.3473	0.7939
normal propyl alcohol	0.2662	0.8080
isopropyl alcohol	0.2662	0.7899
normal butyl alcohol	0.2158	0.8137
isobutyl alcohol	0.2158	0.8058
secondary butyl alcohol	0.2158	0.8114
tertiary butyl alcohol	0.2158	0.7922
methyl tertiary butyl ether (MTBE)	0.1815	0.7460
tertiary amyl methyl ether (TAME)	0.1566	0.7752
ethyl tertiary butyl ether (ETBE)	0.1566	0.7452
di-isopropyl ether (DIPE)	0.1556	0.7300

(d) **Record keeping.**

(1) Any person who owns, leases, operates or controls a gasoline terminal shall maintain records at such terminal containing the following information regarding oxygenated gasoline:

(A) the owner(s) of the gasoline;

(B) volume of each delivery going into or out of the terminal;

(C) type and percentage by volume of oxygenate in the gasoline being delivered if available

(D) oxygen content by weight of each delivery received at the terminal;

(E) the date of such sale or transfer; and

(F) results of tests for oxygenate, including the test method and sampling procedure and the name of the person or company who performed such tests.

(2) All retailers and wholesale purchasers-consumers located in a Control Area shall maintain copies of transfer documents specified in subsection (e) below for each delivery of gasoline during the Control Period for such Control Area.

(3) All distributors who deliver oxygenated gasoline to any retailer or wholesale purchasers-consumers located in a Control Area shall maintain copies of transfer documents specified in subsection (e) below for each delivery of gasoline during the Control Period for such Control Area.

(4) All records and documentation shall be maintained at the terminal for not less than two (2) years, and shall be made available for review upon request of the Department.

(e) **Transfer documents**.

At the time of delivery each distributor or carrier shall provide a transfer document to any retailer or wholesale purchaser-consumer located in a Control Area accepting such delivery during the Control Period for such Control Area. The transfer document may consist of an invoice, bill of lading, shipping paper or other documentation signed by such distributor or carrier. The transfer document shall contain:

(1) the date of delivery;
(2) the name and address of the distributor or carrier;
(3) the volume of oxygenated gasoline being delivered;
(4) a statement that the product is oxygenated gasoline; and
(5) the type of oxygenate used.

(f) **Dispenser Labeling**.

Each retailer or wholesale purchaser-consumer in a Control Area shall label each gasoline dispenser during the Control Period for such Control Area. The label shall meet the requirements of Section 211 of the Clean Air Act.

(g) **Emergency shortage exemption.**

(1) Any person who has insufficient supply of oxygenated gasoline may apply in writing to the Commissioner for an emergency exemption.

(2) The Commissioner may approve an application for an emergency exemption in extreme and unusual circumstances, such as a natural disaster or Act of God, which are outside the control of the applicant such that the applicant has insufficient supply of oxygenated gasoline and which could not have been avoided by the exercise of prudence, diligence and due care, if the applicant demonstrates to the Commissioner's satisfaction that:

(A) the emergency exemption is in the public interest;

(B) the applicant has exercised prudent planning and was not able to avoid the insufficient supply of oxygenated gasoline and has taken all reasonable steps to minimize the extent of the insufficient supply of oxygenated gasoline;

(C) the applicant shows how the requirements for oxygenated gasoline will be expeditiously achieved; and

(D) the applicant provides an offsetting air quality benefit equal to the detriment associated with the non-conforming gasoline, where practicable.

(3) The Commissioner may, in accordance with the provisions of sections 22a-3a-2, 22a-3a-5, and 22a-3a-6 of the Regulations of Connecticut State Agencies, hold a hearing on any request for an emergency exemption.

(4) No person who applies for an emergency exemption shall provide, offer for sale, sell, or exchange in trade any gasoline, other than oxygenated gasoline during the Control Period for such Control Area, without the written approval of the Commissioner.

(5) An emergency exemption issued by the Commissioner shall not exceed thirty (30) days.

(6) Any person to whom the Commissioner has issued an emergency exemption shall:

(A) only provide, offer for sale, sell, or exchange in trade gasoline with oxygen content of at least two percent (2.0%) by weight to a Control Area during the Control Period for such Control Area.

(B) maintain records required by subdivision (d)(1) above documenting the quantity of gasoline transferred each day and;

(C) within thirty (30) days of the end of the emergency exemption, submit a report to the Commissioner in writing which summarizes the information contained in such records for the gasoline transferred into a Control Area.

(h) **Delegation**.

(1) The Commissioner may, in accordance with the provisions of section 22a-2a of the General Statutes, delegate the authority to inspect any retailer or wholesale purchaser-consumer covered by the provisions of this regulation to the Department of Consumer Protection, to any municipality, or to any employee of either the

Department of Consumer Protection or such municipality. Such delegations shall not include the authority to otherwise enforce any provision of this section.

(2) The Commissioner of the Department of Consumer Protection or the chief executive officer of a municipality may apply to the Commissioner for delegation to the Department of Consumer Protection or municipality of all or part of the authority to inspect any retailer or wholesale purchaser-consumer covered by the provisions of the regulation. In making a decision on such application, the Commissioner shall consider:

(A) the knowledge and training of the applicant;

(B) the jurisdictional authority of the applicant;

(C) the financial and administrative capacity of the applicant;

(D) the level of experience and training of the employee of the applicant;

(E) the nature of the duties to be delegated; and

(F) the facilities which will be subject to this regulation.

(3) The Commissioner shall notify the applicant in writing of the decision on the application. If such application is approved, the Commissioner shall prepare a memorandum of understanding which defines the scope of the delegation. The Commissioner and the applicant shall both sign the memorandum of understanding. The memorandum of understanding shall include an effective date and an expiration date, provided that the initial memorandum of understanding shall be valid for a period of up to three (3) years.

(4) Prior to the expiration of the memorandum of understanding, the Commissioner shall review the performance of duties required by the memorandum of understanding, including record keeping, reporting, inspections, and enforcement activities. If the Commissioner is satisfied with such performance, the Commissioner may renew the memorandum of understanding for up to five (5) years.

(5) The Department of Consumer Protection or a municipality may allow employees to perform delegated duties, provided that the Department of Consumer Protection or municipality is ultimately responsible for such activities. Any person who will perform delegated duties shall complete technical training in methods of inspection and reporting.

(6) Any person who performs delegated duties shall abide by the standards and requirements for state employees contained in Chapter 10 of the General Statutes, as amended.

(7) Within fifteen (15) days of the detection of a violation of any standard, criteria or other requirement at a retailer or wholesale purchaser-consumer which the Department of Consumer Protection or a municipality has been delegated the authority to inspect, the Department of Consumer Protection or municipality shall submit a written report concerning such violation to the Commissioner. In the event that further investigation or action by the Department of Consumer Protection or municipality is required, the Commissioner shall notify the Department of Consumer Protection or the municipality of such investigation or action.

(8) Beginning January 1, 1993, the Department of Consumer Protection or a municipality which has been delegated authority to inspect facilities under this section shall submit an annual written report to the Commissioner each January 1 which summarizes the activities, including the number of inspections, conducted under such authority during the previous twelve (12) months.

(9) The Commissioner shall maintain a record of the cost to the Department of administering the delegation program under this section. The Commissioner shall assess the benefits, including any cost reductions, and liabilities to the Department

of the delegation program, including the costs specified above, the number of inspections conducted, and the overall effectiveness of delegation in reducing air pollution in the state.

(10) The Commissioner may revoke all or part of a delegation of authority upon written notice to the Commissioner of the Department of Consumer Protection or the chief executive officer of the municipality. Such revocation shall be effective upon receipt of such notice.

(11) The Commissioner of the Department of Consumer Protection or the chief executive officer of the municipality may terminate all or part of the delegated responsibilities upon thirty (30) days written notice to the Commissioner.

(i) **Federal program waiver**.

The Commissioner may waive the provisions of this section if the Administrator waives the requirements of this program pursuant to a finding under Section 211(m)(3)(c) of the Clean Air Act as amended.

(Effective July 26, 1995; amended September 29, 1999)

Sec. 22a-174-29. ''Hazardous air pollutants''

(a) ''Hazard Limiting Values'' and ''Ambient Air Quality Standards''

(a) (1) ''Hazard Limiting Values'' (HLV)'s for ''Hazardous Air Pollutants'' for 8-hour and 30-minute averaging times are listed in Tables 29-1, 29-2, and 29-3. ''Ambient Air Quality Standards'' (AAQS) are listed in section 22a-174-24.

(a) (2) For a ''hazardous air pollutant'' or other ''air pollutant'' for which either a ''HLV'' or an ''AAQS'' has not yet been established by the ''Commissioner,'' the ''Commissioner'' may request the Commissioner of Health Services to propose changes to Tables 29-1, 29-2 or 29-3 or to section 22a-174-24, to provide supporting documentation for his selection, and to submit it for review by the ''Hazardous Air Pollutant Advisory Panel'' within ninety (90) days of receipt of the request of the ''Commissioner.''

(a) (3) The ''Commissioner'' shall request the ''Panel'' to review the proposal and supporting documentation and to make a recommendation to the ''Commissioner'' to approve, modify or decline to accept the proposal within ninety (90) days of receipt. Within sixty (60) days of receipt of the recommendation of the ''Panel,'' the ''Commissioner'' shall announce a hearing for a new ''HLV'' to be included in Tables 29-1, 29-2, or 29-3 or ''AAQS'' for section 22a-174-24.

(b) **Maximum Allowable Stack Concentrations.**

(1) On or after October 1, 1986, no person shall cause or permit the emission of any hazardous air pollutant listed in Table 29-1 from any stationary source at a concentration at the discharge point in excess of the maximum allowable stack concentration, unless the stationary source is operating in accordance with the terms of an order or permit of the commissioner specifically allowing the continued operation of the stationary source in violation of this subdivision while coming into compliance or the source is in compliance with the provisions of subsection (d)(3) of this section.

(2) No person, who is required to obtain a permit under section 22a-174-3a of the Regulations of Connecticut State Agencies or, who, between July 1, 1986 and March 15, 2002, should have applied for and obtained a permit under former section 22a-174-3 of the Regulations of Connecticut State Agencies, shall cause or permit the emission of any hazardous air pollutant from any stationary source or modification at a concentration at the discharge point in excess of the maximum allowable stack concentration unless such source is in compliance with the provisions of subsection (d)(3) of this section. The commissioner shall not apply the provisions of this

subdivision to the owner or operator of any stationary source who applied for a permit to construct under former section 22a-174-3 of the Regulations of Connecticut State Agencies prior to March 1, 1986 and who received a notice of a complete application prior to July 1, 1986 or to any other owner or operator who received a permit to construct prior to July 1, 1986. Notwithstanding the foregoing, all resources recovery facilities and all incinerators shall meet the standards of this subdivision for all hazardous air pollutants.

(3) If the owner or operator of a stationary source that emits or may emit a hazardous air pollutant is in compliance with the MASC at the discharge point of that source, but the commissioner determines, through ambient monitoring, that the HLV is exceeded, then the commissioner may require that the concentration of the hazardous air pollutant at the discharge point be further reduced.

(4) The owner or operator of any stationary source or modification not subject to the provisions of subdivision (2) of this subsection that emits or may emit a hazardous air pollutant shall comply with the requirements of subdivision (2) of this subsection if the commissioner determines, through ambient monitoring, that the HLV is exceeded as a result of the emissions from that stationary source.

(5) For the purposes of subdivisions (3) and (4) of this subsection, any person who performs ambient air monitoring shall use methods and procedures approved by the commissioner.

(c) Determination of ''Maximum Allowable Stack Concentrations''

(c) (1) The ''maximum allowable stack concentration'' of a ''hazardous air pollutant'' (in micrograms per cubic meter or parts per million) at the ''discharge point'' of a ''stationary source'' shall be determined as follows:

(A) If the ''discharge point'' is twenty (20) meters or less measured vertically from the ground elevation at the ''discharge point,'' the ''MASC'' shall be:

$$\frac{0.885\ \mathrm{HLV}\ (X + 1.08V_0^{.64})1.56}{V_0} \qquad [1]$$

Where ''HLV'' is the applicable ''hazard limiting value'' (in either micrograms per cubic meter or parts per million for 8-hour and 30-minute averaging times), ''V_0'' is the average actual flow rate (in actual cubic meters per second) from the ''discharge point,'' and ''X'' is ten (10) meters, or the distance from the ''discharge point'' to the closest property line, whichever is greater.

(B) If the ''discharge point'' is more than twenty (20) meters measured vertically from the ground elevation at the ''discharge point,'' the ''maximum allowable stack concentration'' (''MASC'') shall be:

$$\frac{0.885\ \mathrm{HLV}\ (x_{max} + 1.08V_0^{0.64})^{1.56}\exp[10.33(H - 20)^2(x_{max} + 1.08V_0^{0.64})^{-1.56}]}{V_0} \qquad [2]$$

Where ''HLV'' is the applicable ''hazard limiting value'' (in micrograms per cubic meter or parts per million) for 8-hour and 30-minute averaging times, ''V_0'' is the average actual flow rate (in actual cubic meters per second) from the ''discharge point,'' ''H'' is the height (in meters) of the ''discharge point,'' measured vertically from the ground elevation at the ''discharge point'' and ''Xmax'' is the greater of the following distances:

(i) ten (10) meters

(ii) the closest distance, in meters, from the ''discharge point'' to the property line, or

(iii) the distance, in meters, determined by:

$$4.47\ (H\text{-}20)^{1.28} \qquad [3]$$

Where ''H'' is the height (in meters) of the ''discharge point'' measured vertically from the ground elevation at the discharge point.

(c) (2) For the purposes of this subsection, in determining the distance from the ''discharge point'' to the property line the ''Commissioner'' may allow consideration for any ''watercourse'' adjacent to the property in question. The ''Commissioner'' may allow the use of the opposite shore in determining the closest distance to the property line.

(d) **Ambient Air Quality Standards.**

(1) The provisions of this subsection apply to any stationary source that emits an air pollutant for which there is an ambient air quality standard (''AAQS'') found in section 22a-174-24 of the Regulations of Connecticut State Agencies except for any criteria air pollutant other than lead.

(2) If the source complies with the MASC and there is an applicable AAQS, then the owner or operator shall not cause or exacerbate a violation of the applicable AAQS unless the impact of the source is less than significant as listed in Table 3a(i)-1 set forth in section 22a-174-3a(i) of the Regulations of Connecticut State Agencies.

(3) If the source does not comply with the MASC and there is an applicable AAQS, then the owner or operator shall:

(A) Install and use Best Available Control Technology for the applicable hazardous air pollutant; and

(B) Not cause an impact in excess of the applicable AAQS if such impact is significant as listed in Table 3a(i)-1 set forth in section 22a-174-3a(i) of the Regulations of Connecticut State Agencies.

(4) Upon the request of the commissioner, the owner or operator of any stationary source shall make and submit to the commissioner, for his approval, a BACT determination for each hazardous air pollutant for which an AAQS has been set, as required by the commissioner, including costs estimates of all control options as may be specified by the commissioner.

(5) For the purposes of this subsection, the commissioner shall allow the use of only air quality models, data bases or other requirements approved by the commissioner prior to the determination of compliance with the AAQS.

(e) **Sampling for Hazardous Air Pollutants.**

(1) Testing to determine concentrations of hazardous air pollutants in the ambient air contiguous to a source may be required if the commissioner determines that the operation of a source might reasonably be expected to cause an exceedance of an applicable HLV or AAQS.

(2) In addition to any testing required by section 22a-174-5(e)(2) of the Regulations of Connecticut State Agencies, testing to determine concentrations of hazardous air pollutants at discharge points of sources may be required by the commissioner if:

(A) An exceedance of a HLV with an 8-hour averaging time is observed;

(B) Two (2) or more exceedances of a HLV with a 30-minute averaging time are observed within two (2) non-overlapping 8-hour periods within any seven (7)-day period;

(C) The source is required to meet the requirements of subdivision (b)(2) of this section;

(D) The emissions from a source are suspected of causing a violation of an AAQS;

(E) There is an enforcement action for violation of section 22a-174-20 or 22a-174-23 of the Regulations of Connecticut State Agencies; or

(F) The source is suspected of emitting a hazardous air pollutant listed in Table 29-1.

(3) Testing to determine concentrations of hazardous air pollutants at either discharge points of stationary sources or in the ambient air shall be conducted by the commissioner, the commissioner's authorized representative or by persons qualified by training or experience in the field of sampling emissions from air pollution sources or in the ambient air. All sampling, emissions testing and laboratory analyses shall be done using procedures and techniques approved by the commissioner prior to the commencement of such testing.

(4) In addition to the provisions of subdivision (1) of this subsection, the commissioner shall perform testing for dioxin emissions in the ambient air in accordance with the requirements of this subdivision. The commissioneru shall perform the following tests in the area of any resources recovery facility. The tests shall be representative of conditions existing prior to the commencement of operation and representative of conditions existing after the issuance of the permit to operate.

(A) For tests representative of conditions existing prior to the commencement of operation for each subject resources recovery facility the commissioner shall analyze at a minimum a total of eight (8) samples. At a minimum, such tests shall consist of the collection of samples at four locations deemed representative by the commissioner during four distinct time periods and the analysis of two samples for each time period for a total of eight samples. The commissioner shall make every effort to perform such testing once per calendar quarter prior to the commencement of operation.

(B) For tests representative of conditions existing after the issuance of a permit under section 22a-174-3a of the Regulations of Connecticut State Agencies for each subject resources recovery facility the commissioner shall analyze at a minimum a total of eight (8) samples. At a minimum, such tests shall consist of the collection of samples at four locations deemed representative by the commissioner during four distinct time periods and the analysis of two representative samples per calendar quarter for the first year following issuance of a permit under section 22a-174-3a of the Regulations of Connecticut State Agencies. Based upon an analysis of the ambient data, results of stack tests, data from the continuous emission monitors and other pertinent information, the commissioner shall determine a representative ambient sampling program for subsequent years. The commissioner shall provide notice of this determination to the chief elected official of each town participating in the subject resources recovery facility.

(f) **Reporting Requirements**

(f) (1) The owner or ''operator'' of any ''stationary source'' shall, upon written notice by the ''Commissioner,'' supply him with information, for those time periods specified, concerning the usage of any substances listed in Table 29-1, 29-2, or 29-3 or the emissions of such substances into the ambient air.

(f) (2) Information required in subdivision (f) (1) shall be provided on forms issued for this purpose by the ''Commissioner.''

(f) (3) If the ''Commissioner'' deems that emissions of a ''hazardous air pollutant'' from a ''stationary source'' are likely to result in a severe and imminent health hazard, information required in subdivision (f) (1) shall be submitted by the owner or ''operator'' of the ''stationary source'' as soon as possible but not later than forty-eight (48) hours after receiving written notice from the ''Commissioner.''

Nothing in this subdivision shall prevent the ''Commissioner'' from taking action in accordance with the provisions of Sec. 22a-181 C.G.S.

(f) (4) Except as provided in subdivision (f) (3), such information required in subdivision (f) (2) shall be provided by the owner or ''operator'' of the ''stationary source'' within ninety (90) days of written notice by the ''Commissioner.''

(g) Permits to operate a ''stationary source'' ordered to comply with any of the provisions of this section.

(g) (1) The ''Commissioner'' may require the owner or ''operator'' of a ''stationary source'' to obtain a permit to operate if he is found by the ''Commissioner'' not to comply with any of the provisions of subsection (b).

(h) **Objectionable odors and compliance with other regulations**

(h) (1) Compliance with this section by a ''stationary source'' does not in any manner relieve the owner or ''operator'' of the responsibility to comply with the provisions of section 22a-174-23 or any other section of these regulations.

(i) **Adjustments to the MASC for Time Periods Less Than 8 Hours.**

Notwithstanding the provisions of subsection (c), the Commissioner may allow an adjustment to the MASC for sources which emit continuously for a period of more than thirty (30) minutes but less than eight (8) hours by multiplying the MASC determined under subsection (c) by the following factor:

$$\text{Adjustment Factor} = 5 - 4 \left(\frac{T-.5}{7.5} \right)$$

Where T = Number of hours the source is in continuous operation.

(Effective October 21, 1988; amended April 4, 2006)

TABLE 29-1

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS* 8-HOUR	30-MINUTE
2-Acetylamino fluorene	53-96-3	—	—	—	—
Acrylonitrile	107-13-1	22	110	0.01	0.05
Aflatoxins	83219-44-7	—	—	—	—
	83219-45-8	—	—	—	—
4-Aminodiphenyl	92-67-1	—	—	—	—
Arsenic & compounds (as As)	7440-38-2	0.05	0.25	—	—
Arsenic pentoxide	1303-28-2	—	—	—	—
Arsine	7784-42-1	1	5	0.25ppbv	1.25 ppbv
Asbestos**	1332-21-4	—	—	—	—
Auramine	2465-27-2	—	—	—	—
Azathioprine	446-86-6	—	—	—	—
Benz(a)pyrene***	50-32-8	—	—	—	—
Benzene	71-43-2	150	750	0.05	0.25
Benzidine	92-87-5	—	—	—	—
Beryllium	7440-41-7	0.01	0.05	—	—
Beryllium oxide	1304-56-9	—	—	—	—
Beryllium sulfate	13510-49-1	—	—	—	—
Chlorambucil	305-03-3	—	—	—	—
Chlordane	57-74-9	2.5	12.5	—	—
Chlorinated camphene	8001-35-2	2.5	12.5	—	—
Chlornaphthazine	494-03-1	—	—	—	—
Chlorobenzilate	510-15-4	—	—	—	—
Chloroform	67-66-3	250	1,250	0.05	0.25
bis-Chloromethyl ether	542-88-1	0.015	0.075	5.pptv	25.pptv
Chloromethyl methyl ether	107-30-2	—	—	—	—

* Volumetric units are in parts per million by volume, unless shown as parts per billion by volume (ppbv) or parts per trillion by volume (pptv).

** The "HLV" for asbestos (all forms, including amosite, chrysotile, crocidolite, tremolite, and fibrous talc) is 500 fibers, of a length of 5 micrometers or more, per cubic meter (8-hour average) and 2,500 fibers, of a length of 5 micrometers or more, per cubic meter (30-min. average).

*** See Polycyclic Aromatic Hydrocarbons

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-1, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Chromic acid and chromates (as Cr)....	—	0.25	1.25	—	—
Chromite ore processing (chromate), as Cr.....	—	0.25	1.25	—	—
Chromium, metal.....	7440-47-3	2.5	12.5	—	—
Coal tar pitch volatiles.....	8007-45-2	1	5	—	—
Coke oven emissions.....	—	—	—	—	—
Cyclophosphamide.....	50-18-0	—	—	—	—
Dibromochloropropane.....	96-12-8	0.05	0.25	—	—
3,3'-Dichlorobenzidine.....	91-94-1	—	—	—	—
1,2-Dichloroethane.....	107-06-2	20	100	5.ppbv	25.ppbv
Diethylstilboestriol.....	39011-86-4	—	—	—	—
Diethyl sulfate.....	64-67-5	—	—	—	—
4-Dimethylaminoazobenzene.....	60-11-7	—	—	—	—
Dimethyl sulfate.....	77-78-1	2.5	12.5	0.5 ppbv	2.5 ppbv
Dioxane, technical grade.....	123-91-1	450	2,250	0.125	0.625
Estrogens.....	—	—	—	—	—
Ethylene dichloride.....	107-06-2	20	100	5.ppbv	25.ppbv
Heptachlor.....	76-44-8	2.5	12.5	—	—
Hexachloroethane.....	67-72-1	50	250	5.ppbv	25.ppbv
Kepone.....	143-50-0	—	—	—	—
Melphalan.....	148-82-3	—	—	—	—
4,4'-Methylene bis (2-chloraniline)...	101-14-4	0.015	0.075	—	—
MOCA.....	101-14-4	0.015	0.075	—	—
Morpholine.....	110-91-8	350	1,750	0.1	0.5
Mustard gas.....	505-60-2	—	—	—	—
Myleran.....	55-98-1	—	—	—	—
beta-Napthylamine.....	91-59-8	—	—	—	—
Nickel carbonyl, as Ni.....	13463-39-3	1.75	8.75	0.25ppbv	1.25 pp
Nickel (metal).....	7440-02-0	5	25	—	—
Nickel, soluble compounds (as Ni)*...	—	0.075	0.375	—	—

* Carcinogens

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardc air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-1, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Nickel sulfide	12035-72-2	—	—	—	—
Nickel sulfide roasting, fume	—	—	—	—	—
and dust (as Ni)	—	5	25	—	—
4-Nitrodiphenyl	92-93-3	—	—	—	—
Nitrogen mustard	55-86-7	—	—	—	—
n-Nitrosodimethylamine	62-75-9	—	—	—	—
Oxymetholone	434-07-1	—	—	—	—
Perchloroethylene**	127-18-4	1,700	8,500	0.25	1.25
Phenacetin	62-44-2	—	—	—	—
Polynuclear aromatic hydrocarbons (PAH)	50-32-8	0.1*	0.5*	—	—
beta-Propiolactone	57-57-8	7.5	37.5	2.5ppbv	12.5 ppbv
1,1,2,2-Tetrachloroethane	79-34-5	34.4	172	5.ppbv	25.ppbv
Thorium dioxide	1314-20-1	—	—	—	—
o-Toluidine	95-53-4	45	225	0.01	0.5
Toxaphene	8001-35-2	2.5	12.5	—	—
Treosulfan	299-75-2	—	—	—	—
1,1,2-Trichloroethane	79-00-5	225	1,125	0.05	0.25
Trichloroethylene	79-01-6	1,350	6,750	0.25	1.25
2,4,6-Trichlorophenol	88-06-2	—	—	—	—
Vinyl chloride	75-01-4	50	250	0.025	0.125

* Benzene-soluble fraction

** Perchloroethylene has been placed in Group 1 provisionally, pending further research by the Department of Health Services and the "Hazardous Air Pollutant Review Panel".Polycyclic Aromati Hydrocarbons

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardc air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-2

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS* 8-HOUR	30-MINUTE
Actinomycin D	1402-38-6	—	—	—	—
Adriamycin	23214-92-8	—	—	—	—
Aldrin	309-00-2	1.5	7.5	—	—
Allyl glycidyl ether	106-92-3	220	1,100	0.05	0.25
2-Aminoanthraquinone	117-79-3	—	—	—	—
1-Amino-2-methylanthraquinone	82-28-0	—	—	—	—
3-Amino 1,2,4-triazole (amitrole)	61-82-5	—	—	—	—
o-Anisidine	29191-52-4	5	25	1.ppbv	5.ppbv
Antimony trioxide, handling & use (as Sb)	1309-64-4	5	25	—	—
Antimony trioxide production (as Sb)	1309-64-4	5	25	—	—
Aramite	140-57-8	—	—	—	—
Arsenic trioxide production (as As)	1327-53-3	0.25	1.25	—	—
Benz(a)anthracene	56-55-3	—	—	—	—
Benzo(b)fluoranthene	205-99-2	—	—	—	—
Benzotrichloride	98-07-7	—	—	—	—
Brominated biphenyls					
Butadiene (1,3-butadiene)	106-99-0	22,000	110,000	10	50
n-Butyl glycidyl ether (BGE)	2426-08-6	1,350	6,750	0.25	1.25
Cadmium	7440-43-9	0.4	2.0	—	—
Cadmium dust & salts (as Cd)	7440-43-9	0.4	2.0	—	—
Cadmium oxide fume (as Cd)	1306-19-0	1.0	5.0	—	—
Cadmium sulfate	10124-36-4	—	—	—	—
Carbon tetrachloride	56-23-5	300	1,500	0.05	0.25
Chloramphenicol	56-75-7	—	—	—	—
1-Chloro,2,3-epoxypropane	106-89-8	20	100	6.ppbv	30.ppbv
bis-Chloroethyl nitrosourea (BCNU)	154-93-8	—	—	—	—
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	13909-09-6	—	—	—	—
Chrysene	218-01-9	—	—	—	—
Cisplatin	15663-27-1	—	—	—	—
p-Cresidine	120-71-8	—	—	—	—

* Volumetric units are in parts per million by volume, unless shown as parts per billion by volu (ppbv) or parts per trillion by volume (pptv).

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardo air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-2. Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS* 8-HOUR	30-MINUTE
Cupferron	135-20-6	—	—	—	—
Cycasin	14901-08-7	—	—	—	—
Dacarbazene	4342-03-4	—	—	—	—
DDT (Dichlorodiphenyl-trichloro-ethane)	50-29-3	5	25		
2,4-Diaminoanisole sulfate	39156-41-7	—	—	—	—
Dibenz(a,h) anthracene	53-70-3	—	—	—	—
7H-Dibenzo(c,g) carbazole	194-59-2	—	—	—	—
Dibenzo(a,h) pyrene	189-64-0	—	—	—	—
Dibenzo(a,i) pyrene	189-55-9	—	—	—	—
1,2-Dibromoethane	106-93-4	1,550	7,750	0.2	1
Dienestrol	84-17-3	—	—	—	—
Diepoxybutane	1464-53-5	—	—	—	—
Di-2,3-epoxypropyl ether	2238-07-5	10	50	—	—
Di(2-ethylhexyl) phthalate	117-81-7	50	250	—	—
3-3'-Dimethoxybenzidine	119-90-4	—	—	—	—
4-Dimethylaminobenzene	1300-73-8	100	500	0.21	0.1
3,3'-Dimethylbenzidine	119-93-7	—	—	—	—
Dimethyl carbamoyl chloride	79-44-7	—	—	—	—
1,1-Dimethylhydrozine	57-14-7	10	50	5.ppbv	25.ppbv
3,3'-Dimethyloxybenzidine	119-90-4	—	—	—	—
Dinitrotoluene	121-14-2	15	75	—	—
Direct Black 38	1937-37-7	—	—	—	—
Direct Blue 6	2610-05-1	—	—	—	—
Direct Brown 95	10300-74-0	—	—	—	—
Epichlorhydrin	106-89-8	20	100	6.ppbv	30.ppbv
Ethinylestridiol	57-63-6	—	—	—	—
Ethylene dibromide	106-93-4	1,550	7,750	0.2	1
Ethylene oxide	75-21-8	20	100	0.01	0.05
Ethylene thiourea	96-45-7	—	—	—	—
Formaldehyde	50-00-0	12	60	0.01	0.05
Hexochlorobenzene	118-74-1	—	—	—	—
Hexachlorobutadiene	87-68-3	2.4	12	—	—
Hexamethyl phosphoramide	680-31-9	—	—	—	—
Hydrazine	302-01-2	1	5	1.ppbv	5.ppbv

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-2, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	(ug/m3) 30-MINUTE	VOLUMETRIC UNITS 8-HOUR	VOLUMETRIC UNITS 30-MINUTE
Hydrazine sulfate	10034-93-2	—	—	—	—
Hydrazobenzene	122-66-7	—	—	—	—
Indeno(1,2,3-cd) pyrene	193-39-5	—	—	—	—
Iron dextran complex	9004-66-4	—	—	—	—
Isopropyl glycidyl ether (IGE)	4016-14-2	2,400	12,000	0.5	2.5
Lead acetate	301-04-2	—	—	—	—
Lead chromate (as Cr)	18454-12-1	0.5	2.5	—	—
Lead phosphate	7446-27-7	—	—	—	—
Lindane	58-89-9	5	25	—	—
Mestranol	72-33-3	—	—	—	—
4,4-Methylene dianiline	101-77-9	8	40	1.ppbv	5.ppbv
4,4'-Methylene bis (n,n-dimethyl) benzenamide	101-61-1	—	—	—	—
Methyl hydrazine	60-34-4	—	—	—	—
Methyl iodide	74-88-4	100	500	0.02	0.1
Metronidazole	443-48-1	—	—	—	—
Michler's ketone	90-94-8	—	—	—	—
Mirex	2385-85-5	—	—	—	—
Monomethyl hydrazine	60-34-4	—	—	—	—
Nitrilotriacetic acid	139-13-9	—	—	—	—
5-Nitro-o-anisidine	99-59-2	—	—	—	—
Nitrofen	1836-75-5	—	—	—	—
2-Nitropropane	79-46-9	360	1,800	0.1	0.5
Nitrosamines	—	—	—	—	—
n-Nitrosodi-n-butylamine	924-16-3	—	—	—	—
n-Nitrosodiethanolamine	1116-54-7	—	—	—	—
n-Nitrosodiethylamine	55-18-5	—	—	—	—
n-Nitrosodiphenylamine	86-30-6	—	—	—	—
n-Nitrosodi-n-propylamine	621-64-7	—	—	—	—
n-Nitroso-n-ethylurea	759-73-9	—	—	—	—
n-Nitroso-n-methylurea	684-93-5	—	—	—	—
n-Nitrosomethylvinylamine	4549-40-0	—	—	—	—
n-Nitrosomorpholine	59-89-2	—	—	—	—
n-Nitrosonornicotine	16543-55-8	—	—	—	—
n-Nitrosopiperidine	100-75-4	—	—	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-2, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
n-Nitrosopyrrolidine	930-55-2	—	—	—	—
n-Nitrososarcosine	20661-60-3	—	—	—	—
Norethisterone	68-22-4	—	—	—	—
Oestradiol-17-beta	2529-64-8	—	—	—	—
Oestrone	53-16-7	—	—	—	—
Phenazopyridine	94-78-0	—	—	—	—
Phenazopyridine hydrochloride	136-40-3	—	—	—	—
Phenantoin (and sodium salt)	50-12-4	—	—	—	—
Phenoxyacetic acid herbicides	—	—	—	—	—
Phenyl glycidyl ether (PGE)	122-60-1	60	300	0.01	0.05
Phenylhydrazine	100-63-0	200	1,000	0.05	0.25
Phenyl-2-naphthylamine	135-88-6	—	—	—	—
Phenytoin	57-41-0	—	—	—	—
Polybrominated biphenyls	—	—	—	—	—
Polychlorinated biphenyls:					
42% Cl	53469-21-9	0.01	0.05	—	—
54% Cl	11097-69-1	0.01	0.05	—	—
Procarbazine hydrochloride	366-70-1	—	—	—	—
Progesterone	57-83-0	—	—	—	—
Propane sultone	1120-71-4	—	—	—	—
Propylene imine	75-55-8	50	250	0.02	0.1
Propylthiouracil	51-52-5	—	—	—	—
Reserpine	50-55-5	—	—	—	—
Saccharine	81-07-2	—	—	—	—
Safrole	94-59-7	—	—	—	—
Selenium sulfide	7446-34-6	—	—	—	—
Streptozotocin	18883-66-4	—	—	—	—
Sulfallate	95-06-7	—	—	—	—
Tetrachlorinated dibenzo-p-dioxins*	1746-01-6	—	—	—	—
Thioacetamide	62-55-5	—	—	—	—
Thiotepa	52-24-4	—	—	—	—
Thiourea	62-56-6	—	—	—	—
o-Tolidine	119-93-7	—	—	—	—

* The "HLV" for dioxin is 0.7 picograms per cubic meter (8-hour average). There is no "HLV" in volumetric units. Concentration is expressed in terms of 2,3,7,8 dibenzo-p-dioxin equivalents, as defined in section 22a-174-1. There is an "ambient air quality standard" for this substance contained in section 22a-174-24.

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-2, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
p-Toluidine	106-49-0	90	450	0.02	0.1
o-Toluidine hydrochloride	636-21-5	—	—	—	—
Triaziquone	68-76-8	—	—	—	—
Tris(1-aziridinyl)phosphine sulfide	140-56-7	—	—	—	—
Tris (2,3-dibromopropyl)phosphate	126-72-7	—	—	—	—
Uracil mustard	66-75-1	—	—	—	—
Urethane	51-79-6	—	—	—	—
Vinyl bromide	593-60-2	44	220	11.ppbv	55.ppbv
Vinyl cyclohexene dioxide	106-87-6	600	3,000	0.10.5	
Xylidine	1330-73-8	100	500	0.02	0.1
Zinc chromate (as Cr)	13530-65-9	0.5	2.5	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS* 8-HOUR	30-MINUTE
Acetaldehyde	75-07-0	3,600	18,000	2	10
Acetic acid	69-19-7	500	2,500	0.2	1
Acetic anhydride	108-24-7	400	2,000	0.1	0.5
Acetone	67-64-1	11,800	59,000	5	25
Acetone cyanohydrin	75-86-5	—	—	—	—
Acetonitrile	75-05-8	680	3,400	0.39	1.95
Acetylene	74-86-2	—	—	—	—
Acetylene dichloride	540-59-0	15,800	79,000	4	20
Acetylene tetrabromide	79-27-6	280	1,400	0.02	0.1
Acetylsalicylic acid	50-78-2	100	500	—	—
Acrolein	107-02-8	5	25	2.ppbv	10.ppbv
Acrylamide	79-06-1	6	30	—	—
Acrylic acid	79-10-7	600	3,000	0.2	1
Adiponitrile	111-69-3	360	1,800	0.08	0.4
Allyl alcohol	107-18-6	100	500	0.04	0.2
Allyl chloride	107-05-1	60	300	0.02	0.1
Allyl propyl disulfide	2179-59-1	240	1,200	0.04	0.2
Aluminum metal and oxide	7429-90-5	200	1,000	—	—
Aluminum pyro powder	—	100	500	—	—
Aluminum welding fumes	—	100	500	—	—
Aluminum soluble salts	—	40	200	—	—
Aluminum alkyls (not otherwise classified)	—	40	200	—	—
2-Aminoethanol	141-43-5	120	600	0.04	0.2
2-Aminopyridine	504-29-0	40	200	0.01	0.05
Ammonia	7664-41-7	360	1,800	0.5	2.5
Ammonium chloride fume	12125-02-9	200	1,000	—	—
Ammonium sulfamate	7773-06-0	200	1,000	—	—
n-Amyl acetate	628-63-7	10,500	52,500	2	10
sec-Amyl acetate	626-38-0	13,000	65,000	2.5	10
Aniline	62-53-3	200	1,000	0.04	0.2
p-Anisidine	29191-52-4	10	50	2.ppbv	10.ppbv
Antimony & compounds (as Sb)	—	10	50	—	—
ANTU (-Naphthyl thiourea)	86-88-4	6	30	—	—
Asphalt (petroleum) fumes	8052-42-4	100	500	—	—

* Volumetric units are in parts per million by volume, unless shown as parts per billion by volume (ppbv) or parts per trillion by volume (pptv).

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS* 8-HOUR	30-MINUTE
Atrazine	1912-24-9	100	500	—	—
Azinphos-methyl	86-50-0	4	20	—	—
Barium (soluble compounds), as Ba	7440-39-3	10	50	—	—
Baygon (propoxur)	114-26-1	10	50	—	—
Benomyl	17804-35-2	200	1,000	—	—
Benzal chloride	98-87-3	—	—	—	—
Benzenethiol	108-98-5	40	200	0.01	0.05
Benzo(r,s,t) pentaphene	189-55-9	—	—	—	—
p-Benzoquinone	106-51-4	8	40	2.ppbv	10.ppbv
Benzoyl chloride	98-88-4	—	—	—	—
Benzoyl peroxide	94-36-0	100	500	—	—
Benzyl chloride	100-44-7	100	500	0.02	0.1
Biphenyl	92-52-4	30	150	2.6 ppbv	13.ppbv
Bismuth telluride	1304-82-1	200	1,000	—	—
Bismuth telluride, Se-doped	—	100	500	—	—
Borates, tetra, sodium salts					
- anhydrous	1303-96-4	20	100	—	—
- decahydrate	1303-96-4	100	500	—	—
- pentahydrate	1303-96-4	20	100	—	—
Boron oxide	1303-86-2	200	1,000	—	—
Boron tribromide	10294-33-4	200	1,000	0.02	0.1
Boron trifluoride	7637-07-2	—	—	—	—
Bromacil	314-40-9	200	1,000	0.02	0.1
Bromine	7726-95-6	14	70	2.ppbv	10.ppbv
Bromine pentafluoride	7789-30-2	14	70	2.ppbv	10.ppbv
Bromochloromethane/chlorobromomethane	74-97-5	21,000	105,000	4	20
Bromoform	75-25-2	100	500	0.01	0.05
Butane	106-97-8	38,000	190,000	16	80
1-Butanethiol	109-79-5	30	150	0.01	0.05
2-Butanethiol	513-53-1	30	150	0.01	0.05
2-Butanone	78-93-3	11,800	59,000	4	20
2-Butoxyethanol	111-76-2	2,400	12,000	0.5	2.5
n-Butyl acetate	123-86-4	14,200	71,000	3	15
sec-Butyl acetate	105-46-4	19,000	95,000	4	20
tert-Butyl acetate	540-88-5	19,000	95,000	4	20

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Butyl acrylate	141-32-2	1,100	5,500	0.2	1
n-Butyl alcohol	71-36-3	6,000	30,000	2	10
sec-Butyl alcohol	78-92-2	6,100	30,500	2	10
tert-Butyl alcohol	75-65-1	6,000	30,000	2	10
Butylamine	109-73-9	—	—	—	—
tert-Butyl chromate (as CrO3)	1189-85-1	—	—	—	—
n-Butyl lactate	138-22-7	500	2,500	0.1	0.5
Butyl mercaptan	109-79-5	30	150	0.01	0.05
o-sec-Butylphenol	89-72-5	600	3,000	0.1	0.5
p-tert-Butyltoluene	98-51-1	1,200	6,000	0.2	1
n-Butyronitrile	109-74-0	440	2,200	0.16	0.8
Cadmium oxide production	1306-19-0	1	5	—	—
Calcium arsenate (as As)	7778-44-1	—	—	—	—
Calcium cyanamide	156-62-7	10	50	—	—
Calcium hydroxide	1305-62-0	100	500	—	—
Calcium oxide	1305-78-8	40	200	—	—
Camphor, synthetic	76-22-2	240	1,200	0.04	0.2
Caprolactam dust	105-60-2	20	100	—	—
Caprolactam vapor	105-60-2	400	2,000	0.1	0.5
Captafol (difolatan)	2425-06-1	2	10	—	—
Captan	113-06-2	100	500	—	—
Carbaryl (Sevin)	63-25-2	100	500	—	—
Carbofuran (Furadan)	1563-66-2	2	10	—	—
Carbon black	1333-86-4	70	350	—	—
Carbon disulfide	75-15-0	60	300	0.02	0.1
Carbon tetrabromide	558-13-4	28	140	2.ppbv	10.ppbv
Carbonyl chloride (Phosgene)	75-44-5	8	40	2.ppbv	10.ppbv
Carbonyl fluoride	353-50-4	100	500	0.04	0.2
Catechol	120-80-9	400	2,000	0.1	0.5
Cesium hydroxide	21351-79-1	40	200	—	—
2-Chloraniline	106-47-8	0.06	0.3	0.01 ppbv	0.05 ppbv
Chlorinated diphenyl oxide	55720-99-5	10	50	—	—
Chlorine	7782-50-5	60	300	0.02	0.1
Chlorine dioxide	10049-04-4	6	30	2.ppbv	10.ppbv
Chlorine trifluoride	7790-91-2	—	—	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Chlormadione acetate	302-22-7	—	—	—	—
Chloroacetaldehyde	107-20-0	—	—	—	—
alpha - Chloroacetophenone (Phenacyl chloride)	532-27-4	6	30	1.ppbv	5.ppbv
Chloroacetyl chloride	79-04-0	4	20	1.ppbv	5.ppbv
Chlorobenzene	108-90-7	7,000	35,000	1.5	7.5
o-Chlorobenzylidene malonitrile	2698-41-1	8	40	1.ppbv	5.ppbv
Chlorobromomethane/bromochloromethane.	74-97-5	21,000	105,000	4	20
2-Chloro-1,3-butadiene	126-99-8	900	4,500	0.2	1
Chlorodifluoromethane	75-45-6	70,000	350,000	20	100
Chlorodiphenyl (42% Chlorine)	53469-21-9	20	100	—	—
Chlorodiphenyl (54% Chlorine)	11097-69-1	10	50	—	—
2-Chloroethanol	107-07-3	320	1,600	0.1	0.5
Chloropentafluoroethane	76-15-3	126,400	632,000	20	100
1-Chloro-1-nitro-propane	600-25-9	200	1,000	0.04	0.2
Chloropicrin	76-06-2	14	70	2.ppbv	10.ppbv
beta - Chloroprene	126-99-8		900	4,500	0.2 1
o-Chlorostyrene	1331-28-8	5,700	28,500	1	5
o-Chlorotoluene	95-49-8	5,000	25,000	1	5
Chlorpyrifos (Dursban)	2921-88-2	4	20	—	—
Chromium (II) compounds, as Cr	—	10	50	—	—
Chromium (III) compounds, as Cr	—	10	50	—	—
Chromium (IV) compounds, non-carcinogenic, as Cr	—	0.5	2.5	—	—
Chromyl chloride	14977-61-8	3	15	0.5ppbv	2.5ppbv
Clofibrate	637-07-1	—	—	—	—
Clomiprene	911-45-5	—	—	—	—
Clopidol	2971-90-6	200	1,000	—	—
Coal dust	—	40	200	—	—
Cobalt metal, dust & fume (as Co)	7440-48-4	2	10	—	—
Cobalt carbonyl, as Co	00000-00-0	2	10	—	—
Cobalt hydrocarbonyl, (as Co)	16842-03-8	2	10	—	—
Copper - dusts & mists (as Cu)	7440-50-8	20	100	—	—
Copper fume	7440-50-8	2	10	—	—
Cotton dust, raw	—	4	20	—	—

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TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Crag herbicide	556-22-9	300	1,500	—	—
Cresol	1319-77-3	200	1,000	0.048	0.24
Crotonaldehyde	123-73-9	120	600	0.04	0.2
Crufomate	299-86-5	100	500	—	—
Cumene	98-82-8	4,900	24,500	1	5
Cyanamide	420-04-2	40	200	—	—
Cyanides, as CN	51-50-8	100	500	—	—
	143-33-9	100	500	—	—
Cyanogen	460-19-5	400	2,000	0.2	1
Cyanogen chloride	506-77-4	—	—	—	—
Cyclamates	100-88-9	—	—	—	—
Cyclohexane	110-82-7	21,000	105,000	6	30
Cyclohexanethiol	1569-69-3	—	—	—	—
Cyclohexanol	108-93-0	4,000	20,000	1	5
Cyclohexanone	108-94-1	2,000	10,000	0.5	2.5
Cyclohexene	110-83-8	20,300	101,500	6	30
Cyclohexylamine	108-91-8	800	4,000	0.2	1
Cyclonite	121-82-4	30	150	—	—
Cyclopentadiene	542-92-7	4,000	20,000	1.5	7.5
Cyclopentane	287-92-3	17,000	85,000	6	30
Cyhexatin	13121-70-5	—	—	—	—
2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	200	1,000	—	—
Dalapon	75-99-0	120	600	0.02	0.1
Dapsone	80-08-0	—	—	—	—
Decaborane	17702-41-9	6	30	1.ppbv	5.ppbv
Decanethiol	143-10-2	—	—	—	—
Demeton	8065-48-3	2	10	0.2 ppbv	1.ppbv
Diacetone alcohol	123-42-2	4,800	24,000	1	5
1,2-Diaminoethane	107-15-3	500	2,500	0.2	1
Diazinon	333-41-5	2	10	—	—
Diazomethane	334-88-3	8	40	4.ppbv	20.ppbv
Diborane	19287-45-7	2	10	2.ppbv	10.ppbv
Dibrom	300-76-5	60	300	—	—
2-n-Dibutylaminoethanol	102-81-8	280	1,400	0.04	0.2

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TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Dibutyl phosphate	107-66-4	100	500	0.02	0.1
Dibutyl phthalate	84-74-2	100	500	—	—
Dichloracetylene	7572-29-4	—	—	—	—
o-Dichlorobenzene	95-50-1	—	—	—	—
p-Dichlorobenzene	106-46-7	9,000	45,000	1.5	7.5
Dichlorodifluoromethane	75-71-8	99,000	495,000	20	100
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	4	20	—	—
1,1-Dichloroethane	75-34-3	8,000	40,000	2	10
1,2-Dichloroethylene	540-59-0	15,800	79,000	4	20
Dichloroethyl ether	111-44-4	600	3,000	0.1	0.5
Dichloromethane	75-09-2	7,000	35,000	2	10
Dichloromonofluoromethane	75-43-4	800	4,000	0.2	1
1,1-Dichloro-1-nitroethane	594-72-9	200	1,000	0.04	0.2
Dichloropropene	542-75-6	100	500	0.02	0.1
2,2-Dichloropropionic acid	75-99-0	120	600	0.02	0.1
Dichlorotetrafluoroethane	76-14-2	140,000	700,000	20	100
Dichlorvos (DDVP)	62-73-7	20	100	2.ppbv	10.ppbv
Dicrotophos (Bidrin)	141-66-2	5	25	—	—
Dicyclohexyl methane 4,4'-diisocyanate	—	1.1	5.5	—	—
Dicyclopentadiene	77-73-6	600	3,000	0.1	0.5
Dicyclopentadienyl iron	102-54-5	200	1,000	—	—
Dieldrin	60-57-1	5	25	—	—
Diethanolamine	111-42-2	300	1,500	0.06	0.3
Diethylamine	109-89-7	600	3,000	0.2	1
Diethylaminoethanol	100-37-8	1,000	5,000	0.2	1
Diethyl ether	60-29-7	24,000	120,000	8	40
Diethyl ketone	96-22-0	14,100	70,500	4	20
Diethyl phthalate	84-66-2	100	500	—	—
Diethylene triamine	111-40-0	80	400	0.02	0.1
Difluorodibromomethane	75-61-6	17,200	86,000	2	10
Diglycidal ether	2238-07-5	10	50	2.ppbv	10.ppbv
Diisobutyl ketone	108-83-8	2,800	14,000	0.46	2.3
Diisocyanates, not listed	—	—	—	0.1 ppbv	0.5 ppbv
Diisopropylamine	108-18-9	400	2,000	0.1	0.5

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3. Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Dimethisterone	79-64-1	—	—	—	—
Dimethoxymethane	109-87-5	62,000	310,000	20	100
Dimethyl acetamide	127-19-5	700	3,500	0.2	1
Dimethylamine	124-40-3	360	1,800	0.2	1
Dimethylaniline	121-69-7	500	2,500	0.1	0.5
Dimethylformamide	68-12-2	600	3,000	0.2	1
Dimethylphthalate	131-11-3	100	500	—	—
Dinitolmide	148-01-6	100	500	—	—
Dinitrobenzene - o isomer	528-29-0	20	100	3.ppbv	15.ppbv
Dinitrobenzeze - m isomer	99-65-0	20	100	3.ppbv	15.ppbv
Dinitrobenzene - p isomer	100-25-4	20	100	3.ppbv	15.ppbv
Dinitro-o-cresol	534-52-1	4	20	—	—
3,5-Dinitro-o-toluamide (Dinitolmide)	148-01-6	100	500	—	—
Dioxathion (Delnav)	78-34-2	4	20	—	—
Diphenyl	92-52-4	20	100	2.6 ppbv	13.ppbv
Diphenylamine	122-39-4	200	1,000	—	—
Diphenylmethane diisocyanate	101-68-8	1	5	—	—
Diphenylphthalate	—	—	—	—	—
Dipropylene glycol methyl ether	34590-94-8	12,000	60,000	2	10
Dipropyl ketone	123-19-3	4,700	23,500	1	5
Diquat	85-00-7	10	50	—	—
Di-sec octyl phthalate	117-81-7	100	500	—	—
Disulfiram	97-77-8	40	200	—	—
Disulfoton	298-04-4	2	10	—	—
Disyston	298-04-4	2	10	—	—
2,6-Ditert butyl-p-cresol	128-37-0	200	1,000	—	—
Diuron	330-54-1	200	1,000	—	—
Divinyl benzene	108-57-6	1,000	5,000	—	—
Dodecanethiol	—	—	—	—	—
Dyfonate	944-22-9	2	10	—	—
Endosulfan	115-29-7	2	10	—	—
Endrin	72-20-8	2	10	—	—
EPN	2104-64-5	10	50	—	—
Ethane	74-84-0	—	—	—	—
Ethanol	64-17-5	38,000	190,000	20	100
Ethanolamine	141-43-5	120	600	0.04	0.2

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TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
thion	563-12-2	8	40	—	—
-Ethoxyethanol	110-80-5	380	1,900	0.1	0.5
-Ethoxyethyl acetate	111-15-9	540	2,700	0.1	0.5
thyl acetate	141-78-6	28,000	140,000	8	40
thyl acrylate	140-88-5	400	2,000	0.1	0.5
Ethylamine	75-04-7	360	1,800	0.2	1
Ethyl sec-amyl ketone	541-85-5	2,600	13,000	0.6	3
Ethyl benzene	100-41-4	8,700	43,500	2	10
Ethyl bromide	74-96-4	17,800	89,000	4	20
Ethylbutyl ketone	106-35-4	4,600	23,000	1	5
Ethyl chloride	75-00-3	52,000	260,000	20	100
Ethylene	74-85-1	—	—	—	—
Ethylene chlorohydrin	107-07-3	320	1,600	0.1	0.5
Ethylenediamine	107-15-3	500	2,500	0.2	1
Ethylene glycol dinitrate	628-96-6	6	30	1.ppbv	5.ppbv
Ethylene glycol monomethyl ether acetate	110-49-6	480	2,400	0.1	0.5
Ethylene glycol, vapor	107-21-1	—	—	—	—
Ethylenimine	151-56-4	20	100	0.01	0.05
Ethyl ether	60-29-7	24,000	120,000	8	40
Ethyl formate	109-94-4	6,000	30,000	2	10
Ethylidene norbornene	16219-75-3	—	—	—	—
Ethyl mercaptan	75-08-1	20	100	0.01	0.05
n-Ethylmorpholine	100-74-3	460	2,300	0.1	0.5
Ethyl silicate	78-10-4	1,700	8,500	0.2	1
Ethynodiol acetate	297-76-7	—	—	—	—
Fenamiphos	22224-92-6	2	10	—	—
Fensulfothion (Dasanit)	115-90-2	2	10	—	—
Fenthion	55-38-9	4	20	—	—
Ferbam	14484-64-1	200	1,000	—	—
Ferrovanadium dust	12604-58-9	20	100	—	—
Fluorides (as F)	—	50	250	—	—
Fluorine	7782-41-1	4	20	2.ppbv	10.ppbv

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TABLE 29-3. Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Fluorotrichloromethane	75-69-4	112,000	560,000	20	100
5-Fluorouracil	51-21-8	—	—	—	—
Fonofos	944-22-9	2	10	—	—
Formamide	75-12-7	600	3,000	0.4	2
Formic acid	64-18-6	180	900	0.1	0.5
Furfural	98-01-1	160	800	0.04	0.2
Furfuryl alcohol	98-00-0	800	4,000	0.2	1
Gasoline	8006-61-9	18,000	90,000	6	30
Germanium tetrahydride	7782-65-2	12	60	4.ppbv	20.ppbv
Glass (dust)	—	100.*	500.*	—	—
Glass (fibrous)**	—	—	—	—	—
Glutaraldehyde, activated or unactivated	111-30-8	14	70	—	—
Glycerin mist	56-81-5	—	—	—	—
Glycidol	556-52-5	1,500	7,500	0.5	2.5
Glyconitrile	107-16-4	—	—	—	—
Guthion (Azinphos-Methyl)	86-50-0	4	20	—	—
Hafnium	7440-58-6	10	50	—	—
Hematite	1317-60-8	—	—	—	—
Heptane (n-Heptane)	142-82-5	7,000	35,000	1.75	8.75
Heptanethiol	1639-09-4	—	—	—	—
Hexachlorocyclohexane	319-85-7	—	—	—	—
Hexachlorocyclopentadiene	77-47-4	2	10	0.2	1
Hexachloronaphthalene	1335-87-1	4	20	—	—
Hexadecanethiol	—	—	—	—	—
Hexafluoroacetone	684-16-2	14	70	2.ppbv	10.ppbv
Hexamethylene diisocyanate	822-06-0	0.7	3.5	—	—
Hexane (n-hexane)	110-54-3	3,600	18,000	1	5
Hexane, other isomers	110-54-3	36,000	180,000	10	50
Hexanethiol	111-31-9	—	—	—	—
2-Hexanone	591-78-6	400	2,000	0.1	0.5
Hexone	108-10-1	4,100	20,500	1	5
sec-Hexyl acetate	108-84-9	6,000	30,000	1	5
Hexylene glycol	107-41-5	—	—	—	—
Hydralazine	86-54-4	—	—	—	—

* Respirable

** The "HLV" for fibrous glass is 60,000 fibers of a length of 5 microns or greater per cubic meter (8-hour average) or 300,000 fibers of length of 5 microns or greater per cubic meter (30-minute average).

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TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Hydrazinobenzene	100-63-0	400	2,000	0.1	0.5
Hydrochloride o-anisidine	—	—	—	—	—
Hydrogenated terphenyls	92-94-4	100	500	0.01	0.05
Hydrogen bromide	10035-10-6	200	1,000	0.06	0.3
Hydrogen chloride	7647-01-0	—	—	—	—
Hydrogen cyanide	74-90-8	220	1,100	0.2	1
Hydrogen fluoride	7664-39-3	50	250	0.06	0.3
Hydrogen peroxide	7722-84-1	28	140	0.02	0.1
Hydrogen selenide	7783-07-5	4	20	1.ppbv	5.ppbv
Hydrogen sulfide	7783-06-4	280	1,400	0.2	1
Hydroquinone	123-31-9	40	200	—	—
17x-Hydroxyprogesterone caproate	—	—	—	—	—
2-Hydroxypropyl acrylate	999-61-1	60	300	0.01	0.05
Indene	95-13-6	900	4,500	0.2	1
Indium & Compounds (as In)	7440-74-6	2	10	—	—
Iodine	7553-56-2	—	—	—	—
Iodoform	75-47-8	200	1,000	0.012	0.06
Iron oxide fume	1309-37-1	100	500	—	—
Iron pentacarbonyl	13463-40-6	16	80	2.ppbv	10.ppbv
Iron salts, soluble (as Fe)	—	20	100	—	—
Isoamyl acetate	123-92-2	10,500	52,500	2	10
Isoamyl alcohol	123-51-3	7,200	36,000	2	10
Isobutyl acetate	110-19-0	14,000	70,000	3	15
Isobutyl alcohol	78-83-1	3,000	15,000	1	5
Isobutyronitrile	78-82-0	440	2,200	0.16	0.8
Isonicotinic acid hydrazide	55-22-1	—	—	—	—
Isooctyl alcohol	26952-21-6	5,400	27,000	1	5
Isophorone	78-59-1	460	2,300	0.1	0.5
Isophorone diisocyanate	4098-71-9	0.9	4.5	0.1ppbv	0.5pbv
Isopropoxyethanol	109-59-1	2,100	10,500	0.5	2.5
Isopropyl acetate	108-21-4	19,000	95,000	5	25
Isopropyl alcohol	67-63-0	19,600	98,000	8	40
Isopropylamine	75-31-0	240	1,200	0.1	0.5
n-Isopropyl aniline	643-28-7	200	1,000	0.04	0.2
Isopropyl ether	108-20-3	21,000	105,000	5	25

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TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Isopropyl oils	—	—	—	—	—
Kerosene	8008-20-6	2,000	10,000	—	—
Ketene	463-51-4	18	90	0.01	0.05
Lead, inorg., fumes & dusts (as Pb)	7439-92-1	3	15	—	—
Lead arsenate (as Pb)	10102-48-4	3	15	—	—
Liquified petroleum gas	—	36,000	180,000	20	100
Lithium hydride	7580-67-8	0.5	2.5	—	—
Lynoestrenol	52-76-6	—	—	—	—
Magenta	632-99-5	—	—	—	—
Magnesite	546-93-0	—	—	—	—
Magnesium oxide fume	1309-48-8	200	1,000	—	—
Malathion	121-75-5	200	1,000	—	—
Maleic anhydride	108-31-6	20	100	5.ppbv	25.ppbv
Malonitrile	109-77-3	160	800	0.06	0.3
Manganese dust & compounds (as Mn)	7439-96-5	—	—	—	—
Manganese cyclopentadienyl tricarbonyl (as Mn)	12079-65-1	2	10	—	—
Manganese fume (as Mn)	7439-96-5	20	100	—	—
Manganese tetroxide	1317-35-7	20	100	—	—
Medroxyprogesterone acetate	71-58-9	—	—	—	—
Megestrol acetate	595-33-5	—	—	—	—
6-Mercaptopurine	50-44-2	—	—	—	—
Mercury (alkyl compounds) (as Hg)	—	0.2	1	—	—
Mercury, (all forms except alkyl) (as Hg)	—	—	—	—	—
vapor	—	1	5	—	—
aryl and inorganic compounds	—	2	10	—	—
Mesityl oxide	141-79-7	800	4,000	0.2	1
Methacrylic acid	79-41-4	1,400	7,000	0.4	2
Methanethiol	74-93-1	20	100	0.01	0.05
Methanol	67-56-1	5,200	26,000	4	20
Methomyl	16752-77-5	50	250	—	—
Methotrexate	59-05-2	—	—	—	—
Methoxychlor	72-43-5	200	1,000	—	—
2-Methoxyethanol	109-86-4	320	1,600	0.1	0.5
2-Methoxyethyl acetate	110-49-6	480	2,400	0.1	0.5
4-Methoxyphenol	150-76-5	100	500	—	—

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TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Methyl acetate	79-20-9	12,200	61,000	4	20
Methyl acetylene	74-99-7	33,000	165,000	20	100
Methyl acetylene-propadiene mixture	—	36,000	180,000	20	100
Methyl acrylate	96-33-3	700	3,500	0.2	1
Methylacrylonitrile	126-98-7	60	300	0.02	0.1
Methylal	109-87-5	62,000	310,000	20	100
Methylamine	74-89-5	240	1,200	0.2	1
Methyl n-amyl ketone	110-43-0	4,700	23,500	1	5
n-Methyl aniline	100-61-8	40	200	0.01	0.05
Methyl bromide	74-83-9	1,200	6,000	0.3	1.5
Methyl butyl ketone	591-78-6	80	400	20.ppbv	0.14
Methyl cellosolve	109-86-4	320	1,600	0.1	0.5
Methyl cellosolve acetate	110-49-6	460	1,200	0.1	0.5
Methyl chloride	74-87-3	2,100	10,500	1	5
Methyl chloroform	71-55-6	38,000	190,000	7	35
Methyl 2-cyanoacrylate	137-05-3	160	800	0.04	0.2
Methylcyclohexane	108-87-2	32,000	160,000	8	40
Methylcyclohexanol	25639-42-3	4,700	23,500	1	5
o-Methylcyclohexanone	583-60-8	4,600	23,000	1	5
Methylcyclopentadienyl manganese tricarbonyl (as Mn)	12108-13-3	4	20	2.ppbv	10.ppbv
Methyl demeton	8022-00-2	10	50	—	—
Methylene bis (4-cyclo-hexyl-isocyanate)	5124-30-1	—	—	—	—
Methylene chloride	75-09-2	7,000	35,000	2	10
Methylene diphenyl isocyanate (MDI)	101-68-8	1	5	—	—
Methyl ethyl ketone (MEK)	78-93-3	11,800	59,000	4	20
Methyl ethyl ketone peroxide	1338-23-4	—	—	—	—
Methyl formate	107-31-3	5,000	25,000	2	10
Methyl isoamyl ketone	110-12-3	4,600	23,000	0.96	4.8
Methyl isobutyl carbinol	108-11-2	2,000	10,000	0.5	2.5
Methyl isobutyl ketone	108-10-1	4,000	20,000	1	5
Methyl isocyanate	624-83-9	1	5	0.4 ppbv	2.ppbv
Methyl isopropyl ketone	563-80-4	14,100	70,500	4	20
Methyl mercaptan	74-93-1	20	100	0.01	0.05
Methyl methacrylate	80-62-6	8,200	41,000	2	10
Methyl parathion	298-00-0	4	20	—	—
Methyl n-propyl ketone	107-87-9	10,600	53,000	2.8	14
Methyl silicate	681-84-5	120	600	0.02	0.1
Methyl styrene	98-83-9	4,800	24,000	1	5
Metribuzin	21087-64-9	100	500	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Mevinphos	7786-34-7	2	10	2.ppbv	10.ppbv
Mica*	—	—	—	—	—
Mineral wool fiber	—	200	1,000	—	—
Molybdenum (as Mo) soluble compounds	—	100	500	—	—
Molybdenum (insoluble compounds)	—	200	1,000	—	—
Monocrotophos	6923-22-4	5	20	—	—
Monomethyl aniline	100-61-8	40	200	0.01	0.05
Naled	300-76-5	60	300	—	—
Naphtha**	—	8,000	40,000	2	10
Naphthalene	91-20-3	1,000	5,000	0.2	1
Naphthalene diisocyanate	39394-45-1	0.8	4	—	—
1-Napthylamine	134-32-7	—	—	—	—
Nickel (II) oxide	1313-99-1	0.3	1.5	—	—
Nickel (III) oxide	1314-06-3	0.3	1.5	—	—
Nickel, other soluble compounds (as Ni)***	—	0.3	1.5	—	—
Nicotine	54-11-5	10	50	—	—
Nitrapyrin	1929-82-4	200	1,000	—	—
Nitric acid	7697-37-2	100	500	0.04	0.2
Nitric oxide	10102-43-9	600	3,000	0.5	2.5
p-Nitroaniline	100-01-6	60	300	0.01	0.05
Nitrobenzene	98-95-3	100	500	0.02	0.1
p-Nitrochlorobenzene	100-00-5	20	100	—	—
Nitroethane	79-24-3	6,200	31,000	2	10
Nitrogen trifluoride	7783-54-2	580	2,900	0.2	1
Nitroglycerin	55-63-0	10	50	1.ppbv	5.ppbv
Nitromethane	75-52-5	5,000	25,000	2	10
1-Nitropropane	108-03-2	1,800	9,000	0.5	2.5
Nitrotoluene	99-08-1	220	1,100	0.04	0.2
Nitrous oxide	10024-97-2	1,340	6,700	0.73	3.65
Nonane	111-84-2	21,000	105,000	4	20
Nonanethiol	1455-21-6	—	—	—	—
Norethynodrel	68-23-4	—	—	—	—
Norgestrel	6533-00-2	—	—	—	—
Octachloronaphthalene	2234-13-1	2	10	—	—

* The "HLV" for mica is 0.4 million particles per cubic foot (mppcf), eight-hour average and 2 mppcf, 30-minute average.

** See also VM&P Naphtha

*** Non-carcinogens

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Octadecanethiol	—	—	—	—	—
Octane	111-65-9	7,000	35,000	1.4	7
Octanethiol	111-86-6	—	—	—	—
Oil mist, mineral	8012-95-1	100	500	—	—
Osmium tetroxide (as Os)	20816-12-0	0.04	0.2	4.pptv	20.pptv
Oxalic acid	144-62-7	20	100	—	—
Oxygen difluoride	7783-41-7	2	10	1.ppbv	5.ppbv
Paraffin wax fume	8002-74-2	40	200	—	—
Paraquat, respirable sizes	1910-42-5	2	10	—	—
Parathion	56-38-2	2	10	—	—
Pentaborane	19624-22-7	0.2	1	0.1 ppbv	0.5 ppbv
Pentachloronaphthalene	1321-64-8	10	50	—	—
Pentachlorophenol	87-86-5	10	50	—	—
Pentaerythritol	115-77-5	300	1,500	—	—
Pentane	109-66-0	7,000	35,000	2.3	11.7
Pentanethiol	110-66-7	—	—	—	—
2-Pentanone	107-87-9	10,600	53,000	2.8	14
Perchloromethyl mercaptan	594-42-3	16	80	2.ppbv	10.ppbv
Perchloryl fluoride	7616-94-6	270	1,350	0.06	0.3
Perlite	—	0.6 mppcf*	3 mppcf*	—	—
Phenelzine	51-71-8	—	—	—	—
Phenobarbital	50-06-6	—	—	—	—
Phenol	108-95-2	380	1,900	0.1	0.5
Phenothiazine	92-84-2	100	500	—	—
Phenylbutazone	50-33-9	—	—	—	—
p-Phenylene diamine	106-50-3	2	10	—	—
Phenyl ether (vapor)	101-84-8	140	700	0.02	0.1
Phenyl ether-Diphenyl mixture (vapor)	—	140	700	0.02	0.1
Phenyl mercaptan	108-98-5	40	200	0.01	0.05
Phenyl-1-naphthylamine	90-30-2	—	—	—	—
Phenylphosphine	638-21-1	—	—	—	—
Phorate (Thimet)	298-02-2	1	5	—	—
Phosdrin (Mevinphos)	7786-34-7	2	10	2.ppbv	10.ppbv
Phosgene (carbonyl chloride)	75-44-5	8	40	2.ppbv	10.ppbv
Phosphine	7803-51-2	8	40	6.ppbv	30.ppbv

* mppcf: millions of particles per cubic foot

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Phosphoric acid	7664-38-2	20	100	—	—
Phosphorus (yellow)	7723-14-0	2	10	—	—
Phosphorus oxychloride	10025-87-3	12	60	2.ppbv	10.ppbv
Phosphorus pentachloride	10026-13-8	20	100	2.ppbv	10.ppbv
Phosphorus pentasulfide	1314-80-3	20	100	—	—
Phosphorus trichloride	7719-12-2	30	150	4.ppbv	20.ppbv
Phthalic anhydride	85-44-9	120	600	0.02	0.1
m-Phthalodinitrile	626-17-5	100	500	—	—
Picloram	1918-02-1	200	1,000	—	—
Picric acid	88-89-1	2	10	—	—
Pindone	83-26-1	2	10	—	—
Piperazine dihydrochloride	142-64-3	100	500	—	—
Pival (2-Pivalyl-1,3-indandione)	83-26-1	2	10	—	—
Platinum (metal)	7440-06-4	20	100	—	—
Platinum (soluble salts) (as Pt)	—	0.04	0.2	—	—
Polytetrafluoroethylene decomposition products	—	—	—	—	—
Potassium hydroxide	1310-58-3	—	—	—	—
Prednisone	53-03-2	—	—	—	—
Propane	74-98-6	—	—	—	—
Propanethiol	75-33-2	36,000	180,000	—	—
Propargyl alcohol	107-19-7	40	200	0.02	0.1
Propionic acid	79-09-4	600	3,000	0.2	1
Propionitrile	107-12-0	280	1,400	0.12	0.6
Propoxur	114-26-1	10	50	—	—
n-Propyl acetate	109-60-4	16,800	84,000	4	20
Propyl alcohol	71-23-8	10,000	50,000	4	20
Propylene	115-07-1	—	—	—	—
Propylene dichloride	78-87-5	7,000	35,000	1.5	7.5
Propylene glycol dinitrate	6423-43-4	6	30	1.ppbv	5.ppbv
Propylene glycol monomethyl ether	107-98-2	7,200	36,000	2	10
Propylene oxide	75-56-9	1,000	5,000	0.4	2
n-Propyl nitrate	627-13-4	2,100	10,500	0.5	2.5
Pyrethrum	8003-34-7	100	500	—	—
Pyridine	110-86-1	300	1,500	0.1	0.5

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Quinone	106-51-4	8	40	2.ppbv	10.ppbv
RDX	121-82-4	30	150	—	—
Resorcinol	108-46-3	900	4,500	0.2	1
Rhodium, Metal fume & dusts (as Rh)	7440-16-6	2	10	—	—
- insoluble compounds	—	20	100	—	—
- soluble salts (as Rh)	—	0.02	0.1 —	—	
Ronnel	299-84-3	200	1,000	—	—
Rosin core solder pyrolysis products (as formaldehyde)	—	2	10	—	—
Rotenone (commercial)	83-79-4	100	500	2.ppbv	10.ppbv
Rouge	1309-37-1	—	—	—	—
Selenium compounds (as Se)	—	4	20	—	—
Selenium hexafluoride	7783-79-1	4	20	1.ppbv	5.ppbv
Sesone	136-78-7	200	1,000	—	—
Silane	7803-62-5	140	700	0.1	0.5
Silica, amorphous	60676-86-0	—	—	—	—
Silicon carbide	409-21-2	—	—	—	—
Silver, metal	7440-22-4	0.2	1	—	—
Silver, soluble compounds	—	0.2	1	—	—
Soapstone*	—	—	—	—	—
Sodium azide	26628-22-8	—	—	—	—
Sodium bisulfite	7631-90-5	100	500	—	—
Sodium fluoroacetate (1080)	62-74-8	1	5	—	—
Sodium hydroxide	1310-73-2	40	200	—	—
Sodium metabisulfite	7681-57-4	100	—	—	—
Sprionolactone	52-01-7	—	—	—	—
Stibine	7803-52-3	10	50	2.ppbv	10.ppbv
Stoddard solvent	8052-41-3	7,000.**	35,000.**	1.22**	6.1**
Strychnine	57-24-9	3	15	—	—
Styrene, monomer	100-42-5	4,300	21,500	1	5
Styrene oxide	96-09-3	—	—	—	—
Subtilisins (proteolytic enzymes as 100% pure crystalline enzyme)	1395-21-7	—	—	—	—
Succinonitrile	110-61-2	400	2,000	0.12	0.6
Sulfafurazole	127-69-5	—	—	—	—

* The "HLV" for soapstone is 0.4 million particles per cubic foot (mppcf), eight-hour average and 2 mppcf, 30-minute average.

** Petroleum solvents generally, except kerosene

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Sulfamethoxazole	723-46-6	—	—	—	—
Sulfotep	3689-24-5	4	20	—	—
Sulfur hexafluoride	2551-62-4	120,000	600,000	20	100
Sulfuric acid	7664-93-9	20	100	—	—
Sulfur monochloride	10025-67-9	120	600	0.02	0.1
Sulfur pentafluoride	5714-22-7	5	25	0.5 ppbv	2.5 ppbv
Sulfur tetrafluoride	7783-60-0	8	40	2.ppbv	10.ppbv
Sulfuryl fluoride	2699-79-8	400	2,000	0.1	0.5
Sulprofos	35400-43-2	20	100	—	—
2,4,5-T	93-76-5	200	1,000	—	—
Tantalum	7440-25-7	100	500	—	—
TEDP (Sulfotep)	3689-24-5	4	20	—	—
Teflon decomposition products	—	—	—	—	—
Tellerium & compounds, as Te	13494-80-9	2	10	—	—
Tellerium hexafluoride, as Te	7783-80-4	4	20	0.4	2
Temephos	3383-96-8	200	1,000	—	—
TEPP	107-49-3	1	5	0.08 ppbv	0.4 ppbv
Terphenyls	92-94-4	—	—	—	—
2,3,7,8-Tetrachlorodibenzofuran	51207-31-0	—	—	—	—
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	83,400	417,000	10	50
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	83,400	417,000	10	50
Tetrachloronaphthalene	1335-88-2	40	200	—	—
Tetraethyl lead (as Pb)	78-00-2	1.5	7.5	—	—
Tetrahydrofuran	109-99-9	11,800	59,000	4	20
Tetramethyl lead (as Pb)	75-74-1	1.5	7.5	—	—
Tetramethyl succinonitrile	3333-52-6	60	120	0.01	0.05
Tetranitromethane	509-14-8	160	800	0.02	0.1
Tetrasodium pyrophosphate	7722-88-5	100	500	—	—
Tetryl (2,4,6-trinitrophenyl-methylnitramine)	479-45-8	30	150	—	—
Thallium, soluble compounds (as Tl)	—	2	10	—	—
4,4'-Thiobis (6-tert butyl-m-cresol)	96-69-5	200	1,000	—	—
Thioglycolic acid	68-11-1	100	500	0.02	0.1
Thiram	137-26-8	100	500	—	—
Tin, metal	7440-31-5	40	200	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Tin, inorganic compounds, except SnH4.	—	40	200	—	—
Tin, organic compounds (as Sn).....	—	2	10	—	—
Tin, oxide (as Sn).....	—	40	200	—	—
Titanium dioxide (as Ti).....	13463-67-7	300	1,500	—	—
Toluene.....	108-88-3	7,500	37,500	2	10
Toluene-2,4-diisocyanate (TDI).....	584-84-9	0.72	4	0.1 ppbv	0.5 ppbv
Tributyl phosphate.....	126-73-8	50	250	4.ppbv	20.ppbv
Trichloroacetic acid,.....	76-03-9	100	500	0.02	0.1
1,2,4-Trichlorobenzene.....	120-82-1	800	4,000	0.1	0.5
1,1,1-Trichloroethane.....	71-55-6	38,000	190,000	7	35
Trichlorofluoromethane.....	75-69-4	—	—	—	—
Trichloronaphthalene.....	1321-65-9	100	500	—	—
2,4,5-Trichlorophenol.....	95-95-4	—	—	—	—
1,2,3-Trichloropropane.....	96-18-4	6,000	30,000	1	5
1,1,2-Trichloro-1,2,2-trifluoroethane.	76-13-1	152,000	760,000	20	100
Tricyclohexyltin hydroxide (Cyhexatin)	13121-70-5	100	500	—	—
Triethylamine.....	121-44-8	800	4,000	0.2	1
Trifluoromonobromomethane.....	75-63-8	122,000	610,000	20	100
Trimellitic anhydride.....	552-30-7	0.8	4	0.1 ppbv	0.5 ppbv
Trimethylamine.....	75-50-3	480	2,400	0.2	1
Trimethyl benzene.....	25551-13-7	2,500	12,500	0.5	2.5
Trimethyl phosphite.....	121-45-9	200	1,000	0.04	0.2
2,4-6-Trinitrotoluene (TNT).....	118-96-7	10	50	—	—
Triorthocresyl phosphate.....	73-30-8	2	10	—	—
Triphenyl amine.....	603-34-9	100	500	—	—
Triphenyl phosphate.....	115-86-6	60	300	—	—
Tungsten & compounds, as W - soluble..	—	20	100	—	—
- insoluble.....	—	100	500	—	—
Turpentine.....	8006-64-2	11,200	56,000	2	10
Undecanethiol.....	—	—	—	—	—
Uranium (natural) compounds (as U)					
soluble.....	—	1	5	—	—
insoluble.....	—	4	20	—	—
Valeraldehyde.....	110-62-3	3,500	17,500	1	5
Vanadium, as Pentoxide, - Dust.....	1314-62-1	1	5	—	—
- (Fume).....	1314-62-1	1	5	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) 8-HOUR	30-MINUTE	VOLUMETRIC UNITS 8-HOUR	30-MINUTE
Vinblastine	865-21-4	—	—	—	—
Vincristine	57-22-7	—	—	—	—
Vinyl acetate	108-05-4	600	3,000	0.2	1
Vinylidene chloride	75-35-4	400	2,000	0.1	0.5
Vinyl toluene	25013-15-4	9,600	48,000	2	10
VM & P Naphtha	8030-30-6	27,000	135,000	6	30
Warfarin	81-81-2	2	10	—	—
Welding fumes (not otherwise classified)	—	100	500	—	—
o-Xylene	1330-20-7	8,680	43,400	2	10
m-Xylene	1330-20-7	8,680	43,400	2	10
p-Xylene	1330-20-7	8,680	43,400	2	10
m-Xylene , '-diamine	1477-55-0	—	—	—	—
Yttrium	7440-65-5	20	100	—	—
Zinc chloride fume	7646-85-7	20	100	—	—
Zinc oxide fume	1314-13-2	100	500	—	—
Zinc stearate	557-05-1	—	—	—	—
Zirconium compounds (as Zr)	—	100	500	—	—

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

Sec. 22a-174-30. Dispensing of gasoline/stage I and stage II vapor recovery

(a) **Definitions.**

For the purposes of this section:

(1) ''CARB'' means the State of California Air Resources Board.

(2) ''CARB-certified fill adapter'' means a specialized fitting on a stationary gasoline storage tank that prevents the loosening or overtightening of the connecting line between an entry port of a gasoline fill pipe and the fill line from a gasoline delivery vehicle.

(3) ''Dispensing facility'' means any site where gasoline is transferred to motor vehicles from any stationary storage tank with a capacity of 250 gallons or more.

(4) ''Gasoline'' means any petroleum distillate or blend of petroleum distillate and alcohol having a reid vapor pressure of four pounds per square inch or greater and used as a fuel for internal combustion engines.

(5) ''Major system modification'' means, notwithstanding any definition in section 22a-174-1 of the Regulations of Connecticut State Agencies:

(A) The repair or replacement of any stationary storage tank equipped with a Stage II vapor recovery system;

(B) The repair or replacement of any part of an underground piping system attached to a stationary storage tank equipped with a Stage II vapor recovery system, excluding the repair or replacement of any part of an underground piping system that is accessible for such repair or replacement without excavation;

(C) The replacement of a vapor balance Stage II vapor recovery system with a vacuum assist Stage II vapor recovery system; or

(D) The replacement of a vacuum assist Stage II vapor recovery system with a vapor balance Stage II vapor recovery system.

(6) ''Owner or operator'' means any person who owns, leases, operates or controls a dispensing facility subject to this section.

(7) ''Reid vapor pressure'' or ''RVP'' means the vapor pressure of a liquid in pounds per square inch absolute at one hundred (100) degrees Fahrenheit as determined by American Society for Testing and Materials (ASTM) method D5191-01.

(8) ''Stage I vapor recovery system'' means a vapor recovery system that prevents the discharge to the atmoshphere of gasoline vapors while gasoline is transferred between a delivery vehicle and a dispensing facility in accordance with the provisions of section 22a-174-20 (a) of the Regulations of Connecticut State Agencies.

(9) ''Stage II vapor recovery system'' or ''system'' means a vapor recovery system that prevents the discharge to the atmosphere of at least ninety-five percent (95%) by weight of gasoline vapors displaced during the dispensing of gasoline into a motor vehicle fuel tank.

(10) ''Throughput'' means the number of gallons of gasoline delivered into motor vehicles through all equipment at a dispensing facility over a specified period of time.

(11) ''Two-point stage I vapor recovery system'' means a stationary storage tank possessing an entry port for a gasoline fill pipe and an exit port for a vapor connection that seals when the vapor return connection is disconnected in a manner that will prevent the discharge of gasoline vapors to the atmoshpere.

(12) ''Vacuum assist Stage II vapor recovery system'' means a Stage II vapor recovery system that uses a vacuum-generating device to draw gasoline vapors from a motor vehicle's gasoline fuel tank during the dispensing of gasoline into such tank.

(b) **Regulated dispensing facilities.**

(1) On or after November 30, 1992, any owner or operator of a dispensing facility shall install a Stage II vapor recovery system if such facility begins actual

construction of a stationary storage tank of any size and such facility has a throughput of ten thousand (10,000) gallons or more during any calendar month. No such person shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such facility on or after November 30, 1992 unless a properly operating Stage II vapor recovery system is used for such transfer.

(2) After May 15, 1993, no owner or operator of a dispensing facility for which construction commenced between November 15, 1990 and November 30, 1992 and which has a throughput of ten thousand (10,000) gallons or more during any calendar month shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such dispensing facility unless a properly operating Stage II vapor recovery system is used for such transfer.

(3) After November 15, 1993, no owner or operator of a dispensing facility which existed, or for which construction commenced, on or before November 15, 1990 and which has a monthly throughput of one hundred thousand (100,000) gallons or more shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such dispensing facility unless a properly operating Stage II vapor recovery system is used for such transfer. Such monthly throughput shall be calculated based on the highest throughput in a calendar month during the two year period between November 30, 1990 and November 30, 1992. If such a dispensing facility was inactive for any period during the two-year period, such period shall be extended to include a total of twenty-four months of activity.

(4) After November 15, 1994, no owner or operator of a dispensing facility which existed or for which construction commenced on or before November 15, 1990 and which has a throughput of ten thousand (10,000) gallons or more during any calendar month after November 30, 1992 shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such dispensing facility unless a properly operating Stage II vapor recovery system is used for such transfer.

(5) After a dispensing facility becomes subject to subdivision (1), (2), (3) or (4) of this subsection, the requirements of such subdivision shall always apply to such dispensing facility.

(6) Any owner or operator of a dispensing facility which is not subject to subdivision (1), (2), (3) or (4) of this subsection shall maintain at such dispensing facility records of monthly throughput which demonstrate such a dispensing facility is not subject to subdivision (1), (2), (3) or (4) of this subsection. Such records shall be kept for five (5) years and shall be made available for inspection by a representative of the Department or EPA.

(c) **Equipment specifications.**

(1) No person shall install a Stage II vapor recovery system at a dispensing facility unless:

(A) Such system is or has ever been tested and approved by CARB or

(B) Such system is or has ever been tested and approved by another state using testing methods approved by CARB; and

(C) Such system utilizes only coaxial hoses.

(2) No person shall replace any part of a Stage II vapor recovery system with a new or rebuilt part unless such new or rebuilt part is or has ever been approved for installation in such Stage II vapor recovery system either by CARB or by another state using testing methods approved by CARB.

(3) No person shall modify, remove, replace, add or otherwise render inoperative any part of a Stage II vapor recovery system in such a way that the system becomes

incapable of preventing discharge to the atmosphere of at least ninety-five percent (95%) by weight of gasoline vapors displaced during the dispensing of gasoline.

(4) Each Stage II vapor recovery system shall conform to the applicable specifications of the National Fire Protection Association Automobile and Marine Service Station Code set forth in section 29-320-3a of the Regulations of Connecticut State Agencies.

(5) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall install and maintain the Stage II vapor recovery system in a manner such that the dispensing facility complies with the provisions of sections 22a-449(d)-1 and 22a-449(d)-101 through 22a-449(d)-113 of the Regulations of Connecticut State Agencies.

(6) Unless otherwise specified in an applicable CARB certification, one year after the effective date of this section, no owner or operator of a dispensing facility subject to subsection (b) of this section shall transfer or allow the transfer of gasoline between a delivery vehicle and a stationary storage tank at such facility unless each stationary storage tank is equipped with:

(A) A CARB-certified fill adapter; and

(B) A pressure-vacuum vent valve with a relief setting of three (3), plus or minus one-half (0.5) inch of water column pressure and eight (8), plus or minus two (2.0) inches of water column vacuum.

(7) Two-point Stage I vapor recovery systems shall be installed:

(A) By an owner or operator of any stationary storage tank with an available port one year after the effective date of this section; and

(B) By an owner or operator of any stationary storage tank that does not have an available port at such time the stationary storage tank is replaced or at such time the product in the tank is switched from any other fuel to gasoline.

(d) **Training, maintenance, and labeling.**

(1) Any owner or operator of a dispensing facility subject to subsection (b)(1), (b)(2), (b)(3) or (b)(4) of this section shall require that at least one representative of such dispensing facility attends and successfully completes a training session provided by a Stage II equipment manufacturer, supplier, distributor or installer in the operation and maintenance of the Stage II vapor recovery system used at the facility where such representative is employed. If an owner or operator owns or operates more than one dispensing facility that utilizes the same type of Stage II vapor recovery system, only one representative from one of the dispensing facilities must be trained in accordance with this subsection. Training shall be successfully completed no later than three (3) months after commencement of operation of the dispensing facility's Stage II vapor recovery system, or, if a representative is responsible for more than one facility that utilizes the same type of Stage II vapor recovery system, such training shall successfully be completed no later than three (3) months after the first installation of such Stage II vapor recovery system. If the representative who received the training is no longer employed at that dispensing facility, another representative of such dispensing facility shall attend and successfully complete the training within three (3) months of the departure of such representative who had previously received the training. Training shall include the following areas:

(A) Purposes and effects of the Stage II vapor recovery system;

(B) Operation of the dispensing facility's Stage II vapor recovery system;

(C) Maintenance schedules for the dispensing facility's Stage II vapor recovery system;

(D) Manufacturer's warranties for the dispensing facility's Stage II vapor recovery system; and

(E) Equipment manufacturer contacts (names, addresses, and phone numbers) for parts and service necessary for the proper operation of the dispensing facility's Stage II vapor recovery system.

(2) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall maintain the Stage II vapor recovery system in accordance with specifications that are or have ever been approved by CARB.

(3) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall post, conspicuously on the upper two-thirds of each gasoline dispenser, operating instructions for dispensing gasoline using the Stage II vapor recovery system. Such instructions shall include, at a minimum, the following:

(A) A clear description of how to correctly dispense gasoline using the Stage II vapor recovery system;

(B) A warning not to attempt to continue dispensing gasoline after automatic shutoff of the nozzle; and

(C) A telephone number, 1-800-249-1234, to contact the Department to report problems experienced with the Stage II vapor recovery system.

(e) **Testing.**

(1) The owner or operator of a dispensing facility subject to subsection (b)(1), (b)(2), (b)(3) or (b)(4) of this section shall conduct an initial performance test prior to dispensing any gasoline into a motor vehicle fuel tank to verify that the Stage II vapor recovery system has been properly installed and is functioning properly. Such tests shall be conducted in accordance with the test procedures in the EPA document ''Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities'', Vol. II (EPA-450/3-91-022b) and shall also include:

(A) Liquid blockage testing;

(B) Pressure decay/leak check testing, except that the Amoco V-1 Phase II Vapor Recovery System approved pursuant to CARB executive order G-70-118-AB shall be tested using the CARB-approved pressure decay/leak check test methods set forth in TP-201.3A, ''determination of 5 inch WC static pressure performance of vapor recovery systems of dispensing facilities;''

(C) Automatic shutoff mechanism testing in accordance with test procedures set forth in CARB examination procedures outline 26-F-1, ''Vapor Recovery Systems Field Compliance testing procedures;''

(D) Any other related testing of flow prohibiting mechanisms at the gasoline dispenser;

(E) Pressure-vacuum vent valve testing to verify operation within 0.29 ounces per square inch or 0.5 inches water column of the designed pressure and within 1.2 ounces per square inch or 2 inches water column of the vacuum settings; and

(F) Vacuum assist Stage II vapor recovery system testing using the carb air-to-liquid volume ratio test procedure set forth in TP-201.5.

(2) At least every five years and after November 15, 2004 every three years or upon major system modification, whichever occurs first, an owner or operator of a dispensing facility shall conduct testing to verify that the Stage II vapor recovery system is operating properly. Such testing shall include a leak check test and any and all other functional tests that were required by subdivision (1) of this subsection. Minor excavation conducted solely for the purpose of complying with the require-

ments of subsections (c)(6) and (c)(7) shall not, by itself, trigger the requirement to test pursuant to this subdivision.

(3) Before a person conducts a test pursuant to this subsection, the owner or operator of the dispensing facility shall notify the Department's Bureau of Air Management at least seven (7) days in advance of such testing. Such notification shall include the date, time and location of the test(s), and the name and address of the person conducting the test(s). The owner or operator is not required to submit such notice if a representative of the department will conduct such test.

(4) If any Stage II vapor recovery system does not pass any test required by this subsection, the Stage II vapor recovery system shall be considered to not be operating properly.

(f) **Record keeping requirements.**

(1) Any owner or operator of a dispensing facility subject to subsection (b)(1), (b)(2), (b)(3) or (b)(4) of this section shall maintain, in a location in the State of Connecticut, the following records:

(A) All licenses, as that term is defined in section 4-166 of the Connecticut General Statutes, to construct or operate the dispensing facility or to construct or operate a specific system at the dispensing facility;

(B) All records and results of tests performed pursuant to subsection (e) of this section, including the date of the testing and the names, addresses, and phone numbers of the persons who performed the tests;

(C) A record of any maintenance or repair conducted on any part of the Stage II vapor recovery system, including a description of the maintenance problem, identification of any part or parts repaired or replaced on such Stage II vapor recovery system, the date such part or parts were repaired or replaced, and a general description of the location of the part or parts in the system including the number of the gasoline dispenser;

(D) Proof that a current representative of the dispensing facility received training pursuant to subsection (d) of this section;

(E) A chronological file of all inspection reports of the dispensing facility issued by a representative of the Department, the Department of Consumer Protection or EPA; and

(F) A chronological file of all compliance records, including orders, warnings and notices of violations, issued by a representative of the Department, the Department of Consumer Protection or EPA.

(2) Records required by this subsection shall be made available for inspection and copying by a representative of the Department, EPA or the Department of Consumer Protection.

(3) Records shall be maintained for five (5) years from the date of creation.

(4) An owner or operator shall display in a conspicuous location at the dispensing facility the address in the state of Connecticut at which the records required by subdivision (1) of this subsection are maintained.

(g) **Defective equipment.**

(1) Any Stage II vapor recovery system having a defect, as defined by subdivision (3) of this subsection, shall be immediately tagged ''out of order'' by the owner or operator of the dispensing facility.

(2) An owner or operator of a dispensing facility shall not allow the use of a Stage II vapor recovery system which has been tagged ''out of order'' until such system has been repaired or replaced.

(3) For the purposes of subdivisions (1) and (2) of this subsection, a defect in a Stage II vapor recovery system shall include, but shall not be limited to:

(A) Absence or disconnection of any part required to be used in such Stage II vapor recovery system;

(B) A vapor recovery hose which is crimped, flattened or otherwise impaired, such that the vapor passage is blocked, or when a pressure drop through the vapor recovery hose that exceeds by a factor of two (2) or more the CARB specifications for such Stage II vapor recovery system;

(C) A nozzle boot which has any rip, tear or perforation in the area of the check valve; a triangular-shaped or similar tear one-half (1/2) inch or more to a side; a hole one-half (1/2) inch or more in diameter; or a slit one (1) inch or more in length;

(D) Balance nozzles and nozzles for aspirator and educator assist-type systems which are damaged such that the capability to achieve a seal with a fill pipe interface is affected for one-quarter of the circumference of the faceplate (accumulated);

(E) Nozzles for vacuum assist systems which are damaged such that an area of the vapor guard equal to or greater than one-half (0.5) inch in area is missing;

(F) A nozzle shutoff mechanism that malfunctions in any manner;

(G) A vapor return line, including such parts as swivels, anti-recirculation valves and underground piping, which malfunctions or is blocked or restricted such that the pressure drop through the line exceeds by a factor of two or more the requirements for such Stage II vapor recovery system;

(H) A vapor processing unit which is inoperative;

(I) A vacuum producing device which is inoperative; or

(J) A pressure/vacuum relief valve, vapor check valve, or dry break which is inoperative.

(h) **Delegation.**

(1) The commissioner may, in accordance with the provisions of section 22a-2a of the Connecticut General Statutes, delegate the authority to inspect any dispensing facility covered by the provisions of this section to the Department of Consumer Protection or to any employee of the Department of Consumer Protection. Such delegation shall not include the authority to otherwise enforce any provision of this section.

(2) The commissioner shall implement such delegation of authority by memorandum of understanding. The memorandum of understanding shall include an effective date and an expiration date, provided that the initial memorandum of understanding shall be valid for a period of up to three (3) years.

(3) Prior to the expiration of the memorandum of understanding, the commissioner shall review the performance of duties required by the memorandum of understanding, including record keeping, reporting, inspections and enforcement activities. If the commissioner is satisfied with such performance, the commissioner may renew the memorandum of understanding for up to five (5) years.

(4) Within thirty (30) days of the detection of a violation of any standard, criteria or other requirement at any dispensing facility which the Department of Consumer Protection has been delegated the authority to inspect, the Department of Consumer Protection shall submit a report to the commissioner. In the event that further investigation or action by the Department of Environmental Protection is required, the commissioner shall notify the Department of Consumer Protection of such investigation or action.

(5) The Department of Consumer Protection shall submit an annual report to the commissioner each January 1 which summarizes the activities, including the number

of inspections, conducted under such authority during the previous twelve (12) months.

(6) The commissioner may revoke all or part of a delegation of authority upon written notice to the Commissioner of the Department of Consumer Protection. Such revocation shall be effective upon receipt of such notice.

(7) The Commissioner of the Department of Consumer Protection may terminate all or part of the delegated responsibilities upon thirty (30) days written notice to the commissioner.

(Effective November 24, 1992; amended May 10, 2004)

Sec. 22a-174-31. Control of carbon dioxides emissions

(a) **Definitions and Abbreviations.** Except as otherwise provided, for the purposes of this section and section 22a-174-31a of the Regulations of Connecticut State Agencies:

(1) ''Account number'' means the identification number given by the commissioner to each CO_2 Allowance Tracking System account.

(2) ''Acid rain emissions limitation'' means ''Acid Rain emissions limitation'', as defined in 40 CFR 72.2, regarding emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program.

(3) ''Acid Rain Program'' means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emissions reduction program established by the Administrator under Title IV of the federal Clean Air Act and 40 CFR 72 to 78, inclusive.

(4) ''Administrator'' means ''Administrator'' as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(5) ''Allocate'' or ''allocation'' means the determination by the commissioner of the number of CO_2 allowances to be recorded in the compliance account of a CO_2 budget source, the Connecticut Auction account, an allocation set-aside account, the general account of the sponsor of an approved CO_2 emissions offset project or an account established by any other person.

(6) ''Allocation year'' means a calendar year for which the commissioner allocates CO_2 allowances pursuant to subsection (f) of this section. The allocation year of each CO_2 allowance is reflected in the unique identification number given to the allowance pursuant to subsection (g)(4)(I) of this section.

(7) ''Attribute'' means a characteristic associated with electricity generated using a particular renewable fuel, such as its generation date, facility geographic location, source vintage, emissions output, fuel, state program eligibility, or other characteristic that can be identified, accounted for, and tracked.

(8) ''Automated data acquisition and handling system'' or ''DAHS'' means that component of the continuous emissions monitoring system, or other emissions monitoring system approved for use under subsection (i) of this section, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by subsection (i) of this section.

(9) ''Award'' means an allocation through which the commissioner determines the number of CO_2 allowances to be recorded in the compliance account of a CO_2 budget unit for early reduction CO_2 allowances pursuant to subsection (f)(6) of this section, or the commissioner determines the number of CO_2 offset allowances to be recorded in the general account of a project sponsor pursuant to section 22a-174-31a of the Regulations of Connecticut State Agencies.

(10) ''Billing meter'' means the measurement device used to measure electric or thermal output for commercial billing under a contract where the facility selling the electric or thermal output has different owners from the owners of the party purchasing the electric or thermal output.

(11) ''Boiler'' means a fossil or other fuel-fired device that produces steam or heats water or any other heat transfer medium.

(12) ''Btu'' means British Thermal Unit, a standard measurement used to quantify an amount of energy.

(13) ''Class I renewable energy source'' means ''Class I renewable energy source'' as defined in section 16-1(a) of the Connecticut General Statutes.

(14) ''CO_2'' means carbon dioxide.

(15) ''CO_2 allowance'' means a limited authorization by the commissioner or a participating state under the CO_2 Budget Trading Program to emit up to one ton of CO_2, subject to all the applicable conditions contained in this section.

(16) ''CO_2 allowance deduction'' or ''deduct CO_2 allowances'' means the permanent withdrawal of CO_2 allowances by the commissioner from a CO_2 Allowance Tracking System compliance account.

(17) ''CO_2 allowances held'' or ''hold CO_2 allowances'' means the CO_2 allowances recorded by the commissioner, or submitted to the commissioner, in accordance with subsections (g) and (h) of this section, in a CO_2 Allowance Tracking System account.

(18) ''CO_2 allowance price'' means the price for CO_2 allowances across all participating states for a particular month as determined by the commissioner, calculated based on a volume-weighted average of transaction prices reported to the commissioner, and taking into account publicly reported prices.

(19) ''CO_2 Allowance Tracking System'' means the system by which the commissioner records allocations, deductions, and transfers of CO_2 allowances under the CO_2 Budget Trading Program under this section, the system used to track CO_2 offset allowance projects under section 22a-174-31a of the Regulations of Connecticut State Agencies, and the system used to track CO_2 allowance prices and emissions from affected sources.

(20) ''CO_2 Allowance Tracking System account'' means an account in the CO_2 Allowance Tracking System established by the commissioner for purposes of recording the allocating, holding, transferring, or deducting of CO_2 allowances.

(21) ''CO_2 allowance transfer deadline'' means midnight of March 1 occurring after the end of the relevant control period or, if that March 1 is not a business day, midnight of the first business day thereafter.

(22) ''CO_2 authorized account representative'' means the individual who is authorized by the owners or operators of the source and all CO_2 budget sources at the source, in accordance with subsection (c) of this section, to represent and legally bind each owner or operator in matters pertaining to the CO_2 Budget Trading Program or, for a general account, the individual who is authorized, in accordance with subsection (g) of this section, to transfer or otherwise dispose of CO_2 allowances held in the general account.

(23) ''CO_2 budget emissions limitation'' means the tonnage equivalent, in CO_2 emissions in a control period, of the CO_2 allowances available for compliance deduction for the CO_2 budget source for a control period.

(24) ''CO_2 budget source'' means a facility that includes one or more CO_2 budget units.

(25) ''CO_2 Budget Trading Program'' means the multi-state CO_2 air pollution control and emissions reduction program established pursuant to this section and corresponding regulations in other states as a means of reducing emissions of CO_2 from CO_2 budget sources.

(26) ''CO_2 budget unit'' means an emissions unit that is subject to the CO_2 Budget Trading Program requirements under subsection (b) of this section.

(27) ''CO_2 equivalent'' means a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP).

(28) ''CO_2 offset allowance'' means a CO_2 allowance that is awarded to the sponsor of a CO_2 emissions offset project pursuant to section 22a-174-31a of the Regulations of Connecticut State Agencies and is subject to the relevant compliance deduction limitations of this section.

(29) ''Combined cycle system'' means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(30) ''Combined Heat and Power'' or ''CHP'' means ''Combined heat and power system'' as defined in section 22a-174-22c of the Regulations of Connecticut State Agencies.

(31) ''Combined Heat and Power Long-term PPA Set-aside Account'' means a general account established by the commissioner to hold CO_2 allowances that are offered for sale pursuant to subsection (f)(3) of this section

(32) ''Combined Heat and Power Useful Thermal Energy Set-aside Account'' means a general account established by the commissioner to hold CO_2 allowances that are allocated pursuant to subsection (f)(3) of this section.

(33) ''Combustion turbine'' means an enclosed fossil or other fuel-fired device that is comprised of a compressor, if applicable, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

(34) ''Commence commercial operation'' means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation provided that:

(A) If the unit is a CO_2 budget unit on the date it commences commercial operation and such unit is subsequently modified, reconstructed or repowered, the date on which the CO_2 budget unit commences commercial operation shall remain the unit's date of commencement of commercial operation; and

(B) If the unit is not a CO_2 budget unit on the date it commences commercial operation, the date the unit becomes a CO_2 budget unit for the purposes of this section shall be the unit's date of commencement of commercial operation.

(35) ''Commence operation'' means to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber provided that:

(A) If the unit is a CO_2 budget unit on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered; and

(B) If the unit is not a CO_2 budget unit on the date of commencement of operation, the date the unit becomes a CO_2 budget unit shall be the unit's date of commencement of operation.

(36) ''Commissioner'' means ''commissioner'' as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(37) ''Compliance account'' means a CO_2 Allowance Tracking System account, established by the commissioner for a CO_2 budget source under subsection (g) of this section, in which the CO_2 allowance allocations for the source are initially recorded and in which are held CO_2 allowances available for use by the source for a control period for the purpose of meeting the requirements of subsection (b)(3) of this section.

(38) ''Connecticut Auction Account'' means a general account established by the commissioner to hold CO_2 allowances that are allocated pursuant to subsection (f)(3) of this section.

(39) ''Connecticut Clean Energy Fund'' or ''CCEF'' means the fund created by section 16-245n of the Connecticut General Statutes to address Connecticut's increasing energy needs and any individual authorized to act on behalf of such fund.

(40) ''Connecticut CO_2 Allowance Retirement Account'' means a general account established by the commissioner to hold CO_2 allowances that have been permanently retired.

(41) ''Connecticut CO_2 Trading Program Base Budget'' means the annual amount of CO_2 tons available in Connecticut for allocation in a given allocation year, in accordance with the CO_2 Budget Trading Program. CO_2 offset allowances allocated to project sponsors are separate from and additional to CO_2 allowances allocated from the Connecticut CO_2 Trading Program Base Budget.

(42) ''Consumer Price Index'' or ''CPI'' means the United States Department of Labor, Bureau of Labor Statistics, unadjusted Consumer Price Index for All Urban Consumers: U.S. city average, for All Items on the latest reference base, or if such index is no longer published, such other index as the commissioner determines is appropriate. The CPI for any calendar year is the twelve-month average of the CPI published by the United States Department of Labor, as of the close of the twelve-month period ending on August thirty-first of each calendar year.

(43) ''Continuous emissions monitoring system'' or ''CEMS'' means the equipment required under subsection (i) of this section to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes, using an automated data acquisition and handling system, a permanent record of stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration as applicable, in a manner consistent with 40 CFR 75 and subsection (i) of this section.

(44) ''Control period'' means a three calendar-year period, unless extended by the commissioner to four years upon occurrence of a Stage Two Trigger Event.

(45) ''Customer-side distributed resources'' or ''CDR'' means ''customer-side distributed resources'' as defined in Section 16-1(a) of the Connecticut General Statutes.

(46) ''Customer-side Distributed Resources (CDR) Set-aside Account'' means a general account established by the commissioner to hold CO_2 allowances that are allocated pursuant to subsection (f)(3) of this section.

(47) ''Eligible biomass'' means sustainably harvested, as determined by the commissioner, woody and herbaceous fuel sources that are available on a renewable or recurring basis, excluding old-growth timber, but including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, unadulterated wood and wood residues, animal wastes, other clean organic wastes not mixed with other solid wastes and biogas. ''Eligible biomass'' does not include liquid biofuels.

(48) ''Energy Conservation Management Board'' or ''ECMB'' means the group convened by the Department of Public Utility Control pursuant to section 16-245m

of the Connecticut General Statutes for the purpose of advising and assisting electric distribution companies in the development and implementation of cost-effective energy conservation programs and market transformation initiatives.

(49) ''Excess emissions'' means any tonnage of CO_2 emitted by a CO_2 budget source during a control period that exceeds the CO_2 budget emissions limitation for the source.

(50) ''Fossil fuel'' means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material, except that fossil fuel does not include tire-derived fuel.

(51) ''Fossil fuel-fired'' means, with regard to an emissions unit that commenced operation prior to January 1, 2005, the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than fifty percent of the annual heat input on a Btu basis during any year, or, with respect to an emissions unit that commences operation on or after January 1, 2005, the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than five percent of the annual heat input on a Btu basis during any year.

(52) ''General account'' means a CO_2 Allowance Tracking System account, established under subsection (g) of this section, which is not a compliance account.

(53) ''Global warming potential'' or ''GWP'' means a measure consistent with the values used in the Intergovernmental Panel on Climate Change (IPCC), Third Assessment Report of the radiative efficiency or heat-absorbing ability, of a particular gas relative to that of CO_2 after taking into account the decay rate of each gas, the amount removed from the atmosphere over a given number of years, relative to that of CO_2.

(54) ''Gross generation'' means the electrical output in MWe at the terminals of the generator.

(55) ''H_2O'' means water.

(56) ''Heat input'' means the gross calorific value of all fuels combusted by a CO_2 budget unit.

(57) ''Hr'' means hour.

(58) ''Lb'' means pound.

(59) ''Life-of-the-unit contractual arrangement'' means a power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of the participating unit's nameplate capacity and energy associated therewith while agreeing to pay the proportional amount of such unit's total costs for either:

(A) The economic useful life of the unit,

(B) A cumulative term of no less than 25 years, including agreements that permit an election for early termination, or

(C) A period equal to or greater than 20 years or seventy percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(60) ''Long-term Power Purchase Agreement'' or ''Long-term PPA'' means an agreement, executed prior to January 1, 2000, between a CO_2 budget source and a purchasing party to sell power from the CO_2 budget source for a period of 20 or more years.

(61) ''Market settling period'' means the first fourteen months of any control period.

(62) ''Maximum design heat input'' means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

(63) ''Maximum potential hourly heat input'' means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input calculated in accordance with 40 CFR 75.

(64) ''Monitoring system'' means any monitoring system that meets the requirements of subsection (i) of this section, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

(65) ''MMBtu'' means million Btu of heat input.

(66) ''MWe'' means megawatt electrical.

(67) ''MWh'' means megawatt-hour.

(68) ''Nameplate capacity'' means the maximum electrical output in MWe that an electric generating unit can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy Standards.

(69) ''Non-CO_2 budget unit'' means a unit that does not meet the applicability criteria of subsection (b) of this section.

(70) ''NOx'' means oxides of nitrogen.

(71) ''O_2'' mean oxygen.

(72) ''Operator'' means any person who operates, controls, or supervises a CO_2 budget unit or a CO_2 budget source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

(73) ''Owner'' means any of the following persons:

(A) Any holder of any portion of the legal or equitable title in a CO_2 budget unit;

(B) Any holder of a leasehold interest in a CO_2 budget unit, other than a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the CO_2 budget unit;

(C) Any purchaser of power from a CO_2 budget unit under a life-of-the-unit contractual arrangement in which the purchaser controls the dispatch of the unit; or

(D) With respect to any general account, any person who has an ownership interest in the CO_2 allowances held in the general account and who is subject to the binding agreement for the CO_2 authorized account representative to represent that person's ownership interest with respect to the CO_2 allowances.

(74) ''Participating state'' means a state that has established a regulation implementing a CO_2 Budget Trading Program consistent with the Regional Greenhouse Gas Initiative model rule.

(75) ''Receive'' or ''receipt of'' means, when referring to the commissioner, to come into possession of a document, information, or correspondence, as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the commissioner in the regular course of business.

(76) ''Recordation'', ''record'' or ''recorded'' means, with regard to CO_2 allowances, the movement of CO_2 allowances by the commissioner from one CO_2 Allowance Tracking System account to another, for purposes of allocation, transfer or deduction.

(77) ''Regional Independent System Operator'' or ''Regional ISO'' means ''regional independent system operator'' as defined in section 16-1 of the Connecticut General Statutes.

(78) ''Renewable energy'' means electricity generated from eligible biomass, wind, solar thermal, photovoltaic, geothermal, hydroelectric facilities certified by the Low Impact Hydropower Institute, wave and tidal action, and fuel cells powered by renewable fuels.

(79) ''Renewable Energy Certificate'' or ''REC'' means a certificate that represents the attributes related to one megawatt-hour of electricity generation.

(80) ''Serial number'' means, when referring to CO_2 allowances, the unique identification number assigned to each CO_2 allowance by the commissioner.

(81) ''SO_2'' means sulfur dioxide.

(82) ''Source'' means ''source'' as defined in section 22a-174-1(101) of the Regulations of Connecticut State Agencies, provided that a source with multiple units, is a single facility.

(83) ''Stage one threshold price'' means the product, in dollars, resulting from the multiplication of seven dollars by an annual adjustment factor, where the annual adjustment factor is determined as follows:

Annual adjustment factor = 1 + {[CPI (year) – CPI (2005)] / CPI (2005)}, where:

(A) CPI means, for purposes of the CO_2 Budget Trading Program, the United States Department of Labor, Bureau of Labor Statistics unadjusted Consumer Price Index for All Urban Consumers: U.S. city average, for all items on the latest reference base, or if such index is no longer published, such other index as the commissioner determines is appropriate;

(B) CPI (year) means the CPI for all urban consumers calculated in August of the previous calendar year in which the adjustment is made; and

(C) CPI (2005) means the CPI for all urban consumers for the month of August 2005. The CPI (2005) is 196.4 (with 1982-84=100). Beginning in the month for which a new reference base is established, CPI (2005) will be the CPI value for August 2005 on the new reference base.

(84) ''Stage two threshold price'' means the product, in dollars, resulting from the multiplication of ten dollars by an annual adjustment factor, where the annual adjustment factor is determined as follows:

Annual adjustment factor = 1.02 + {[CPI (year) – CPI (2005)] / CPI (2005)}, where:

(A) CPI means, for purposes of the CO_2 Budget Trading Program, the United States Department of Labor, Bureau of Labor Statistics unadjusted Consumer Price Index for All Urban Consumers: U.S. city average, for All Items on the latest reference base, or if such index is no longer published, such other index as the commissioner determines is appropriate;

(B) CPI (year) means the CPI for all urban consumers for August of the year in which the adjustment is made; and

(C) CPI (2005) means the CPI for all urban consumers for the month of August 2005. The CPI (2005) is 196.4 (with 1982-84=100). Beginning in the month for which a new reference base is established, CPI (2005) will be the CPI value for August 2005 on the new reference base.

(85) ''Stage One Trigger Event'' means any complete twelve month period following the market settling period during which average CO_2 allowance prices are equal to or greater than the stage one threshold price.

(86) ''Stage Two Trigger Event'' means any complete twelve month period following the market settling period during which average CO_2 allowance prices are equal to or greater than the stage two threshold price.

(87) ''State'' means, notwithstanding the definition set forth in section 22a-174-1(104) of the Regulations of Connecticut State Agencies, any state of the United

States of America, the District of Columbia, and the following territories of the United States: the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

(88) ''Submit'' means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation either in person, by United States Postal Service, or by other means of dispatch or transmission and delivery.

(89) ''Ton'' or ''short ton'' means a measure of weight equal to two thousand pounds or 0.9072 metric tons.

(90) ''Twelve month period'' means a period of twelve consecutive months determined on a rolling basis beginning January 1, 2009. On and after February 1, 2009, a new twelve month period shall begin on the first day of each subsequent calendar month.

(91) ''Unit'' means a fossil fuel-fired stationary boiler, combustion turbine or combined cycle system.

(92) ''Unit operating day'' means a calendar day in which a unit combusts any fuel.

(93) ''Useful net thermal energy'' means the energy output of thermal energy used for heating, cooling, industrial processes or other beneficial uses.

(94) ''Voluntary clean energy purchase'' means electricity from renewable energy generation or renewable energy attribute credits representing such renewable energy generation, purchased by a retail electricity customer on a voluntary basis, provided that purchases used to meet any regulatory mandate, such as a renewable portfolio standard, shall not be a voluntary renewable energy purchase.

(95) ''Voluntary Clean Energy Purchase Set-aside Account'' means a general account established by the commissioner to hold CO_2 allowances that are allocated pursuant to subsection (f)(3) of this section.

(b) **Applicability and General Provisions**

(1) Applicability. Any unit that, at any time on or after January 1, 2000, serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe shall be a CO_2 budget source, and any owner or operator of such source that includes one or more such units shall be the owner or operator of a CO_2 budget source subject to the requirements of this section.

(2) Monitoring. In order to determine compliance with the CO_2 requirements of subdivision (3) of this subsection, the owner or operator of a CO_2 budget source subject to this section shall comply with the applicable monitoring requirements set forth in subsection (i) of this section. The commissioner shall determine compliance with subdivision (3) of this subsection using the emissions measurements recorded and reported in accordance with subsection (i) of this section.

(3) General Provisions and CO_2 Requirements.

(A) The owners and operators of each CO_2 budget source shall hold CO_2 allowances available for compliance deductions under subsection (g)(5) of this section, not later than the CO_2 allowance transfer deadline, in the source's compliance account in an amount equal to or greater than the total CO_2 emissions for the control period from all CO_2 budget sources at the source, as determined in accordance with subsections (g) and (i) of this section. In addition:

(i) A CO_2 allowance shall not be deducted to cover emissions for a control period that ends prior to the year for which the CO_2 allowance was allocated; and

(ii) A CO_2 offset allowance shall not be deducted to cover emissions beyond the applicable percent limitations set forth in subsection (g)(5)(B) of this section;

(B) A CO_2 budget source shall be subject to the requirements under subsection (c)(1) of this section starting on January 1, 2009 or the date on which the source commences operation, whichever is later;

(C) CO_2 allowances shall be held in, deducted from, or transferred among CO_2 Allowance Tracking System accounts in accordance with subsections (f), (g) and (h) of this section and section 22a-174-31a(j) of the Regulations of Connecticut State Agencies;

(D) A CO_2 allowance under the CO_2 Budget Trading Program is a limited authorization by the commissioner or a participating state to emit one ton of CO_2 in accordance with the CO_2 Budget Trading Program;

(E) A CO_2 allowance under the CO_2 Budget Trading Program does not constitute a property right;

(F) For the purpose of determining compliance with the subparagraph (A) of this subdivision, total CO_2 emissions, in tons, for a control period shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with subsection (i) of this section, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons; and

(G) Each ton of CO_2 emitted in excess of the CO_2 budget emissions limitation shall constitute a separate violation of this section.

(4) Control period. The first control period is from January 1, 2009 to December 31, 2011, inclusive, provided if a Stage Two Trigger Event occurs during the first control period, then the first control period shall be extended one year to December 31, 2012, inclusive. Each subsequent sequential three calendar year period is a separate control period that may be subject to a single one year extension upon occurrence of a Stage Two Trigger Event during the control period.

(5) Excess emissions. The owner and operator of a CO_2 budget source that has excess emissions in any control period shall after such control period on a time frame established by the commissioner:

(A) Forfeit the CO_2 allowances required for deduction under subsection (g)(5)(G) of this section;

(B) Not be authorized to cover any part of such excess emissions with CO_2 offset allowances under section 22a-174-31a of the Regulations of Connecticut State Agencies; and

(C) Comply with the assessment of any fine, penalty or other obligation under subsection (g)(5)(G) of this section, provided that such assessment shall not limit additional enforcement action by the commissioner.

(6) Recordkeeping and reporting. The owner and operator of a CO_2 budget source shall comply with the following recordkeeping and reporting requirements:

(A) Unless otherwise provided or extended by the commissioner prior to the end of the applicable ten year period, the owner or operator of a CO_2 budget source and each CO_2 budget unit at the source shall make and keep at the source each of the following documents for a period of ten years from the date the document is created:

(i) Notwithstanding the provisions of subparagraph (A) of this subdivision, the account certificate of representation for the CO_2 authorized account representative for the source and each CO_2 budget unit at the source and all documents that demonstrate the truthfulness and accuracy of the statements made in the account certificate of representation, in accordance with subsection (c)(4) of this section, shall be retained on site at the source indefinitely until such documents are superseded

by the submission of a new account certificate of representation changing the CO_2 authorized account representative;

(ii) All emissions monitoring information in accordance with subsection (i) of this section;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CO_2 Budget Trading Program; and

(iv) Copies of all documents used to complete any submission under the CO_2 Budget Trading Program or to demonstrate compliance with the requirements of the CO_2 Budget Trading Program.

(B) The CO_2 authorized account representative of a CO_2 budget source shall submit the reports and compliance certifications required under the CO_2 Budget Trading Program, including those required under subsection (e) of this section.

(7) Liability. The owner and operator of a CO_2 budget source shall be subject to the following:

(A) Any provision of the CO_2 Budget Trading Program that applies to a CO_2 budget source, or the CO_2 authorized account representative of a CO_2 budget source, shall also apply to the owner or operator of such source; and

(B) Any provision of the CO_2 Budget Trading Program that applies to a CO_2 budget unit, or the CO_2 authorized account representative of a CO_2 budget unit, shall also apply to the owner or operator of such unit.

(8) Effect on other authorities. No provision of the CO_2 Budget Trading Program shall be construed as exempting or excluding the owner or operator and, to the extent applicable, the CO_2 authorized account representative of a CO_2 budget source from compliance with the provision of any other applicable state or federal law or regulation.

(9) Computation of time. Notwithstanding section 22a-3a-2(d) of the Regulations of Connecticut State Agencies and unless otherwise stated, the owner or operator of a CO_2 budget source shall be subject to the following computation of time requirements:

(A) Any time period scheduled, under the CO_2 Budget Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs;

(B) Any time period scheduled, under the CO_2 Budget Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs; and

(C) If the final day of any time period, under the CO_2 Budget Trading Program, falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.

Table 31-1
Incorporated Reference Material

Citation	Title or Subject	Date on Document
40 CFR 75 including Appendices A, B, D & E	**Part 75-Continuous Emission Monitoring, Appendix A Specification and Test Procedures, Appendix B Quality Assurance and Quality Control Procedures Fired and Oil-Fired Units Appendix E Optional NO^x Emissions Estimation Protocol For Gas-Fired Peaking Units and Oil-Fired Peaking Units.**	**July 2007 Edition**
	New York State Renewable Portfolio Standard Biomass Guidebook, Appendix B	**May 2006**

(10) Copies of documents incorporated by reference into this section are available by contacting:

Connecticut Department of Environmental Protection
Bureau of Air Management
79 Elm Street
Hartford, Connecticut 06106
(860) 424-3027

(c) **CO_2 Authorized Account Representative for CO_2 Budget Sources**

(1) With respect to the CO_2 authorized account representative, the owner or operator of each CO_2 budget source subject to this section shall comply with the following:

(A) Except as provided under subdivision (3)(B) of this subsection, each CO_2 budget source, including all CO_2 budget units at the source, shall have only one CO_2 authorized account representative, with regard to all matters under the CO_2 Budget Trading Program concerning such source;

(B) The CO_2 authorized account representative of the CO_2 budget source shall be selected by an agreement binding on the owners or operators of the source;

(C) The owner or operator of each CO_2 budge source shall:

(i) Be legally bound by any decision or order issued to the CO_2 authorized account representative by the commissioner or a court regarding the source; and

(ii) Be legally bound by any representations, including any actions, inactions or submissions, by the CO_2 authorized account representative;

(D) No CO_2 Allowance Tracking System account shall be established for a CO_2 budget unit at a source, until the commissioner has received a complete account certificate of representation under subdivision (4) of this subsection for a CO_2 authorized account representative;

(E) Each submission under the CO_2 Budget Trading Program shall be submitted, signed, and certified by the CO_2 authorized account representative for each CO_2 budget source on behalf of which the submission is made, and shall:

(i) Include the following certification statement by the CO_2 authorized account representative: ''I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 budget sources for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''; and

(ii) Be made, signed and certified in accordance with subsection (e)(1) of this section. Otherwise the commissioner shall not accept or act on a submission made on behalf of owners or operators of a CO_2 budget source; and

(F) If the CO_2 budget source is also subject to section 22a-174-22c of the Regulations of Connecticut State Agencies or the Acid Rain Program, the CO_2 authorized account representative shall be the same person as the designated representative under such programs.

(2) With respect to the alternate CO_2 authorized account representative, the owner or operator of each CO_2 budget source subject to this section shall comply with the following:

(A) An account certificate of representation may designate only one alternate CO_2 authorized account representative who may act on behalf of the CO_2 authorized account representative. The agreement by which the alternate CO_2 authorized account representative is selected shall include a procedure for authorizing the alternate CO_2 authorized account representative to act in lieu of the CO_2 authorized account representative;

(B) Upon receipt by the commissioner of a complete account certificate of representation under subdivision (4) of this subsection, any representation, action, inaction, or submission by the alternate CO_2 authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CO_2 authorized account representative;

(C) Except in this subdivision, subdivisions (1)(A), (3) and (4) of this subsection, and subsection (g)(2) of this section, wherever the term ''CO_2 authorized account representative'' is used, such term shall be construed to include the alternate CO_2 authorized account representative; and

(D) If the CO_2 budget source is also subject to section 22a-174-22c of the Regulations of Connecticut State Agencies or the Acid Rain Program, the alternate CO_2 authorized account representative shall be the same person as the alternate designated representative under such programs.

(3) Transfers and name changes. With respect to changing the CO_2 authorized account representative and the alternate CO_2 authorized account representative or a change in ownership or operation of a CO_2 budget source, the owner or operator of each CO_2 budget source shall comply with the following:

(A) Changing the CO_2 authorized account representative. The CO_2 authorized account representative may be changed at any time upon receipt by the commissioner of a superseding complete account certificate of representation under subdivision (4) of this subsection. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative or alternate CO_2 authorized account representative prior to the time and date when the commissioner receives the superseding account certificate of representation shall be binding on the new CO_2 authorized account representative and the owner or operator of the CO_2 budget source and the CO_2 budget units at the source;

(B) Changing the alternate CO_2 authorized account representative. The alternate CO_2 authorized account representative may be changed at any time upon receipt by the commissioner of a superseding complete account certificate of representation under subdivision (2)(B) of this subsection. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative or alternate CO_2 authorized account representative prior to the time and date when the commissioner receives the superseding account certificate of representation shall be binding on the new alternate CO_2 authorized account representative and the owner or operator of the CO_2 budget source and the CO_2 budget units at the source;

(C) Changes in the owners and operators. With respect to a change in ownership or control of the CO_2 budget source, the owner or operator of each CO_2 budget source shall comply with the following:

(i) In the event a new owner or operator of a CO_2 budget source is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the CO_2 authorized account representative and any alternate CO_2

authorized account representative of the source, and the decisions, orders, actions, and inactions of the commissioner, as if the new owner or operator were included in such list; and

(ii) Not later than thirty (30) days following any change in the owner or operator of a CO_2 budget source or a CO_2 budget unit, including the addition of a new owner or operator, the CO_2 authorized account representative or alternate CO_2 authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include such change.

(4) Account certificate of representation. With respect to an account certificate of representation, the owner or operator of each CO_2 budget source shall comply with the following:

(A) A complete account certificate of representation for a CO_2 authorized account representative or an alternate CO_2 authorized account representative shall be submitted on forms prescribed by the commissioner and shall include the following elements:

(i) Identification of the CO_2 budget source for which the account certificate of representation is submitted;

(ii) The name, address, electronic mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative and any alternate CO_2 authorized account representative;

(iii) A list of the owners and operators of the CO_2 budget source;

(iv) The following certification statement by the CO_2 authorized account representative and any alternate CO_2 authorized account representative:

''I certify that I was selected as the CO_2 authorized account representative or alternate CO_2 authorized account representative, as applicable, by an agreement binding on the owners and operators of the CO_2 budget source and each CO_2 budget source at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO_2 Budget Trading Program on behalf of the owners and operators of the CO_2 Budget source and that each such owner and operator shall be fully bound by my representations, actions, inactions or submissions and by any decision or order issued to me by the commissioner or a court regarding the source.'';

(v) A statement that such CO_2 authorized account representative is authorized to legally bind each owner or operator of the CO_2 budget source represented by such CO_2 authorized account representative in all matters pertaining to the CO_2 Budget Trading Program, notwithstanding any agreement between the CO_2 authorized account representative and such owners or operators; and

(vi) The signature of the CO_2 authorized account representative and any alternate CO_2 authorized account representative and the dates signed; and

(B) Unless otherwise required by the commissioner, documents of agreement referred to in the account certificate of representation shall not be submitted to the commissioner. The commissioner shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(5) Objections to the CO_2 authorized account representative.

(A) Once a complete account certificate of representation under subdivision (4) of this subsection has been submitted and received, the commissioner shall rely on the account certificate of representation unless and until the commissioner receives a superseding complete account certificate of representation under subdivision (4) of this subsection; and

(B) Except as provided in subdivision (3)(A) or (B) of this subsection, no objection or other communication submitted to the commissioner concerning the authorization, or any representation, action, inaction, or submission of the CO_2 authorized account representative shall affect any representation, action, inaction, or submission of the CO_2 authorized account representative or the finality of any decision or order by the commissioner under the CO_2 Budget Trading Program.

(6) Delegation by CO_2 authorized account representative and alternate CO_2 authorized account representative.

(A) A CO_2 authorized account representative may delegate, to one or more individuals, such representative's authority to make an electronic submission to the commissioner under this section;

(B) An alternate CO_2 authorized account representative may delegate, to one or more individuals, such representative's authority to make an electronic submission to the commissioner under this section;

(C) In order to delegate authority to make an electronic submission to the commissioner in accordance with subparagraphs (A) and (B) of this subdivision, the CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, shall submit to the commissioner a notice of delegation, in a format prescribed by the commissioner that includes the following elements:

(i) The name, address, electronic mail address, telephone number, and facsimile transmission number of such CO_2 authorized account representative or alternate CO_2 authorized account representative;

(ii) The name, address, electronic mail address, telephone number and facsimile transmission number of each such individual, in this section referred to as the ''electronic submission agent''; and

(iii) For each individual, a list of the type of electronic submissions under subparagraphs (A) or (B) of this subdivision for which authority is delegated to him or her;

(D) A notice of delegation submitted under subsection (c)(6)(C) of this section shall also include the following certification statements by such CO_2 authorized account representative or alternate CO_2 authorized account representative:

(i) ''I agree that any electronic submission to the commissioner that is by the individual identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of delegation and that is made when I am a CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under section 22a-174-31(c)(6)(E) of the Regulations of Connecticut State Agencies shall be deemed to be an electronic submission by me.''; and

(ii) ''Until this notice of delegation is superseded by another notice of delegation under section 22a-174-31(c)(6)(E) of the Regulations of Connecticut State Agencies, I agree to maintain an e-mail account and to notify the commissioner immediately of any change in my e-mail address unless all delegation authority by me under section 22a-174-31(c)(6) of the Regulations of Connecticut State Agencies is terminated.'';

(E) A notice of delegation submitted pursuant to subparagraph (C) of this subdivision shall be effective, with regard to the CO_2 authorized account representative or alternate CO_2 authorized account representative identified in such notice, upon receipt of such notice by the commissioner and until receipt by the commissioner of a superseding notice of delegation by such CO_2 authorized account representative or alternate CO_2 authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission

agent, add a new electronic submission agent, or eliminate entirely any delegation of authority; and

(F) Any electronic submission covered by the certification in subparagraph (D)(i) of this subdivision and made in accordance with a notice of delegation effective under subparagraph (E) of this subdivision shall be deemed to be an electronic submission by the CO_2 authorized account representative or alternate CO_2 authorized account representative submitting such notice of delegation.

(d) **Reserved**

(e) **Compliance Certification**

(1) Compliance certification report. The owner or operator of each CO_2 budget source shall comply with the following compliance certification report requirements:

(A) Applicability and deadline. For each control period in which a CO_2 budget source is subject to the requirements of subsection (b)(3) of this section, the CO_2 authorized account representative of the source shall submit to the commissioner not later than March 1st following the applicable control period, a compliance certification report;

(B) Contents of report. The CO_2 authorized account representative shall include in the compliance certification report required under subparagraph (A) of this subdivision the following elements, on forms prescribed by the commissioner:

(i) Identification of the source and each CO_2 budget source at the source;

(ii) At the CO_2 authorized account representative's option, the serial numbers of the CO_2 allowances that are to be deducted from the source's compliance account under subsection (g)(5) of this section for the control period; and

(iii) The compliance certification required by subparagraph (C) of this subdivision; and

(C) Compliance certification. In the compliance certification report required under subparagraph (A) of this subdivision, the CO_2 authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the CO_2 budget sources in compliance with the CO_2 Budget Trading Program, whether the source and each CO_2 budget source for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the CO_2 Budget Trading Program, including:

(i) Whether the source was operated in compliance with the requirements of subsection (b)(3) of this section;

(ii) Whether the monitoring plan applicable to each unit at the source has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute CO_2 emissions to the unit, in accordance with subsection (i) of this section;

(iii) Whether all the CO_2 emissions from the units at the source were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with subsection (i) of this section. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

(iv) Whether the facts that form the basis for certification under subsection (i) of this section of each monitor at each unit at the source, or for using an excepted monitoring method or alternative monitoring method approved under subsection (i) of this section, if applicable, has changed; and

(v) If a change is required to be reported under subsection (c)(4) of this section, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

(2) Commissioner's action on compliance certifications.

(A) The commissioner may review and conduct independent audits concerning any compliance certification or any other submission under the CO_2 Budget Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions and

(B) The commissioner may deduct CO_2 allowances from or transfer CO_2 allowances to a source's compliance account based on the information in the compliance certifications or other submissions, as approved during the commissioner's review under subparagraph (A) of this subdivision.

(f) **CO_2 Allowance Allocations**

(1) The Connecticut CO_2 Trading Program Base Budget is as follows:

(A) For the 2009 to 2014 allocation years, inclusive, the Connecticut CO_2 Trading Program Base Budget is 10,695,036 tons;

(B) For the 2015 allocation year, the Connecticut CO_2 Trading Program Base Budget is 10,427,660 tons;

(C) For the 2016 allocation year, the Connecticut CO_2 Trading Program Base Budget is 10,160,284 tons;

(D) For the 2017 allocation year, the Connecticut CO_2 Trading Program Base Budget is 9,892,908 tons; and

(E) For the 2018 allocation year and each succeeding allocation year, the Connecticut CO_2 trading program base budget is 9,625,532 tons.

(2) Timing requirements for CO_2 allowance allocations.

(A) Not later than January 1, 2009, the commissioner shall determine the initial CO_2 allowance allocations, in accordance with subdivision (3) of this subsection, for the 2009, 2010, 2011 and 2012 allocation years.

(B) Not later than January 1, 2010 and January 1 of each year thereafter, the commissioner shall determine the initial CO_2 allowance allocations, in accordance with subdivision (3) of this subsection, for the allocation year that commences three years after such applicable deadline for allocation.

(3) CO_2 allowance allocations.

(A) In accordance with the timing provisions of subdivision (2) of this subsection, the commissioner shall allocate each annual CO_2 base budget as follows:

(i) One and one-half (1.5) percent to the Voluntary Clean Energy Purchase Set-aside Account;

(ii) Three and one-half (3.5) percent to the Customer-side Distributed Resources (CDR) Set-aside Account;

(iii) Five (5) percent to the Combined Heat and Power (CHP) Useful Thermal Energy Set-aside Account;

(iv) Up to thirteen (13) percent to the Combined Heat and Power (CHP) Long-term PPA Set-aside Account; and

(v) A minimum seventy-seven (77) percent shall be allocated to the Connecticut Auction Account;

(B) Not later than April 1, 2009 and April 1 of each year thereafter, the commissioner shall allocate from the CHP Useful Thermal Energy Set-aside Account to the compliance account of each CO_2 budget source generating useful net thermal

energy from its CO_2 budget units the number of CO_2 allowances equal to the amount determined by the following equation (rounded to the nearest whole ton), subject to the limitation in subparagraph (C) of this subdivision. CO_2 budget units that are eligible for allowances from the CDR Set-aside Account pursuant to subparagraph (O) of this subdivision shall not be eligible for allowances from the CHP Useful Thermal Output Set-aside Account;

$$\frac{\left((TEG \div 0.80) \text{ x } 136 \frac{lb}{mmBtu}\right)}{2000 \frac{lb}{ton}}$$

Where:

TEG = the average useful net thermal energy (in mmBtu) generated by CO_2 budget units at the CO_2 budget source during the two years preceding the allocation year of the allowances being allocated;

(C) IF $\sum A_{CHP1} <= A_{CHP1\text{-}AV}$, THEN

$A_{CHP1\text{-}ALLOCATED} = A_{CHP1}$.

IF $\sum A_{CHP1} > A_{CHP1\text{-}AV}$, THEN

$$A_{CHP1\text{-}ALLOCATED} = A_{CHP1} \text{ x } \left(\frac{A_{CHP1\text{-}AV}}{\sum A_{CHP1}}\right)$$

rounded to the nearest whole allowance.

Where:

A_{CHP1} = the number of CO_2 allowances calculated for each CO_2 budget source pursuant to subparagraph (B) of this subdivision;

$\sum A_{CHP1}$ = the total number of CO_2 allowances calculated for CO_2 budget sources pursuant to subparagraph (B) of this subdivision;

$A_{CHP1\text{-}AV}$ = the number of CO_2 allowances available for allocation from the CHP Useful Thermal Output Set-aside Account;

$A_{CHP1\text{-}ALLOCATED}$ = the number of CO_2 allowances the commissioner shall allocate to the compliance account of each CO_2 budget source;

The commissioner may adjust an allowance allocation under this subparagraph as necessary to not exceed $A_{CHP1\text{-}AV}$;

(D) If $\sum A_{CHP1} < A_{CHP1\text{-}AV}$, allowances from the CHP Useful Thermal Output Set-aside Account not allocated for a vintage year shall be transferred to the Connecticut Auction Account, from which such allowances shall be auctioned in accordance with subdivision (4) of this subsection;

(E) Not later than March 1, 2009 and March 1 of each year thereafter, CO_2 budget sources shall submit, on forms prescribed by the commissioner, information required for the equation specified in subparagraph (B) of this subdivision relating amount of useful net thermal energy generated by CO_2 budget units at the CO_2 budget source during the two years preceding the allocation year of the allowances being allocated. Such information shall be submitted to the commissioner as part of the annual output report required pursuant to subsection (i)(9)(J)(ii) of this section;

(F) Subject to the requirements set forth in subparagraphs (G) to (M), inclusive, of this subdivision, on three separate occasions, not later than June 1, 2009, not

later than June 1, 2010 and not later than June 1, 2011, the commissioner shall offer for sale allowances from the CHP Long-term PPA Set-aside Account to eligible CO_2 budget sources which operate CO_2 budget units that are also CHP units with existing long-term power purchase agreements. CO_2 budget units that are eligible for allowances from the CDR Set-aside Account pursuant to subparagraph (O) of this subdivision shall not be eligible for allowances from the CHP Long-term PPA Set-aside Account;

(G) In order to purchase allowances from the CHP Long-term PPA Set aside Account, a CO_2 budget source shall, on or before October 31, 2008, or not later than 30 days of revising a long-term PPA, submit an application to the commissioner. Such application shall include:

(i) A copy of the long-term PPA for the electricity generated from the CO_2 budget units at the CO_2 budget source;

(ii) A demonstration that the long-term PPA was executed prior to January 1, 2001;

(iii) Certification that the CO_2 budget source can not pass along to the purchasing party in a long-term PPA any additional operating costs resulting from the implementation of this section;

(iv) Certification that the CO_2 budget source can not recover the costs of CO_2 allowances as a result of participation in electricity markets;

(v) A disclosure of any renegotiations or revisions to the long-term PPA that have been executed on or after January 1, 2001; and

(vi) Any other information the commissioner may require;

(H) A CO_2 budget source shall remain eligible to purchase allowances from the CHP Long-term PPA Set-aside Account established pursuant to subparagraph (G) of this subdivision until the expiration date of the long-term PPA, the date on which the long-term PPA is revised, or December 31, 2011, whichever occurs first, provided that:

(i) If the long-term PPA is revised after the submission of the application pursuant to subparagraph (G) of this subdivision, the CO_2 budget source shall notify the commissioner of such revision not later than 30 days of execution; and

(ii) The CO_2 budget source shall no longer be eligible to purchase CO_2 allowances from the CHP Long-term PPA Set-aside Account until eligibility is re-established by submitting an application under subparagraph (G) of this subdivision. The CO_2 budget source shall document the reasons that the revised long-term PPA does not include provisions related to the cost of CO_2 allowances;

(I) The commissioner shall offer for sale allowances from the CHP Long-term PPA Set-aside Account to eligible CO_2 budget source at the following prices:

(i) Two dollars in 2009; and

(ii) Two dollars as indexed for inflation in years 2010 and 2011 as follows: two dollars multiplied by the ratio of the Consumer Price Index for all-Urban consumers published by the United States Department of Labor, as of August 31 of the previous calendar year to the Consumer Price Index for all-Urban consumers for August 2008;

(J) The maximum number of allowances that an eligible CO_2 budget source may purchase from the CHP Long-term PPA Set-aside Account shall be equal to the total number of tons of CO_2 emissions emitted by CO_2 budget units at the CO_2 budget source in the previous calendar year (rounded to the nearest whole ton), less any allowances allocated to the compliance account of the CO_2 budget source pursuant to subparagraphs (B) and (C) of this subdivision, subject to the limitations in subparagraphs (K) and (L) of this subdivision;

(K) If an existing long-term PPA is set to expire mid-year in any given year, the commissioner shall adjust the maximum number of allowances that may be purchased from the CHP Long-term PPA Set-aside Account to reflect the number of days in the current year for which the long-term PPA will be valid;

(L) IF $\sum A_{CHP2} <= A_{CHP2\text{-}AV}$, THEN

$$A_{CHP2\text{-}OFFERED} = A_{CHP2}.$$

IF $\sum A_{CHP2} > A_{CHP2\text{-}AV}$, THEN

$$A_{CHP2\text{-}OFFERED} = A_{CHP2} \times \left(\frac{A_{CHP2\text{-}AV}}{\sum A_{CHP2}} \right)$$

rounded to the nearest whole allowance.

Where:

A_{CHP2} = the maximum number of CO allowances determined for each CO_2 budget source pursuant to subparagraphs (J) and (K) of this subdivision;

$\sum A_{CHP2}$ = the total number of CO_2 allowances determined for CO_2 budget sources pursuant to subparagraphs (J) and (K) of this subdivision;

$A_{CHP2\text{-}AV}$ = the number of CO_2 allowances available for allocation from the CHP Useful Thermal Output Set-aside Account;

$A_{CHP2\text{-}OFFERED}$ = the number of CO_2 allowances the commissioner shall offer for sale of each eligible CO_2 budget source;

The commissioner may adjust an allowance allocation under this subparagraph as necessary to not exceed $A_{CHP2\text{-}AV}$;

(M) Allowances sold to a CO_2 budget source from the CHP Long-term PPA Set-aside Account may be used for compliance only and shall not be resold by or transferred from the compliance account of a CO_2 budget source;

(N) If $\sum A_{CHP2} < A_{CHP2\text{-}AV}$, allowances from the CHP Long-term PPA Set-aside Account not sold for a vintage year shall be transferred to the Connecticut Auction Account, from which such allowances shall be auctioned in accordance with subdivision (4) of this subsection;

(O) Not later than February 28, 2010 and February 28 of each year thereafter, the commissioner shall allocate from the CDR Set-aside Account to the compliance account of each CO_2 budget source, which operates CO_2 budget units that are also customer-side distributed resources that received funds pursuant to the customer-side distributed resources program established by the Department of Public Utilities Control pursuant to section 16-243i of the Connecticut General Statutes, the number of CO_2 allowances equal to the total number of tons of CO_2 emissions emitted by such CO_2 budget units in the previous calendar year (rounded to the nearest whole ton), subject to the limitation in subparagraph (P) of this subdivision;

(P) IF $\sum A_{CDR} <= A_{CDR\text{-}AV}$, THEN

$$A_{CDR\text{-}ALLOCATED} = A_{CDR}.$$

IF $\sum A_{CDR} > A_{CDR\text{-}AV}$, THEN

$$A_{CDR\text{-}ALLOCATED} = A_{CDR} \times \left(\frac{A_{CDR\text{-}AV}}{\sum A_{CDR}} \right)$$

rounded to the nearest whole allowance.

Where:

A_{CDR} = the number of CO_2 allowances calculated for each CO_2 budget source pursuant to subparagraph (F) of this subdivision;

$\sum A_{CDR}$ = the total number of CO_2 allowances calculated for CO_2 budget sources pursuant to subparagraph (F) of this subdivision;

$A_{CDR\text{-}AV}$ = the number of CO_2 allowances available for a allocation from the CDR Set-aside Account;

$A_{CDR\text{-}ALLOCATED}$ = the number of CO_2 allowances the commissioner shall allocate to the compliance account of each CO_2 budget source;

The commissioner may adjust an allowance allocation under this subparagraph as necessary to not exceed $A_{CDR\text{-}AV}$; and

(Q) If $\sum A_{CDR} < A_{CDR\text{-}AV}$, allowances from the CDR Set-aside Account not allocated for a vintage year shall be transferred to the Connecticut Auction Account, from which such allowances shall be auctioned in accordance with subdivision (4) of this subsection.

(4) CO_2 allowance auctions.

(A) For purposes of this subdivision, ''auction'' means the open and transparent process by which the commissioner or a contractor or trustee selected by the commissioner, in consultation with the Department of Public Utility Control, shall offer for sale and sell the CO_2 allowances in the Connecticut Auction Account at least once per year;

(B) Except as provided by subparagraph (C) of this subdivision, by December 31 of each allocation year, the commissioner or a contractor or trustee selected by the commissioner shall offer for sale the CO_2 allowances with the same allocation year that are held in the Connecticut Auction Account. Such auction shall be conducted under the oversight of the commissioner and the Department of Public Utility Control; and

(C) CO_2 allowances which are transferred to the Connecticut Auction Account from the CHP Useful Thermal Energy Set-aside Account pursuant to subdivision (3)(D) of this subsection, from the CHP Long-term PPA Set-aside Account pursuant to subdivision (3)(N) of this subsection, from the CDR Set-aside Account pursuant to subdivision (3)(Q) or from the Voluntary Clean Energy Purchase Set-aside Account pursuant to subdivision (6)(C) of this subsection shall be offered for sale at the next auction held following the transfer of such allowances.

(5) Distribution of auction proceeds. Proceeds derived from the sale of CO_2 allowances held in the Connecticut Auction Account shall be distributed as follows:

(A) Seven and one-half (7.5) percent of auction proceeds, less any amount of revenue refunded pursuant to subsection (j) of this section, shall be retained by the commissioner for use in accordance with section 22a-200c(c) of the Connecticut General Statutes;

(B) Not later than December 31, 2009 and December 31 of each year thereafter, up to twenty-three (23) percent of proceeds from auctions, less any amount of revenue refunded pursuant to subsection (j) of this section, may be transferred to an account held by the Connecticut Clean Energy Fund. Proceeds are to be used to support the development of Class I renewable energy sources. The amount of proceeds to be transferred to CCEF shall be determined based on the following criteria:

(i) Not later than October 31, 2009 and October 31 of each year thereafter, CCEF may apply for such funds on forms prescribed by the commissioner; and

(ii) The commissioner shall transfer funds to CCEF provided that CCEF demonstrates such funds will be committed within twelve months from the date of receipt to support the development of Class I renewable energy sources and further provided that for the prior year ending June 30 there is no more than ten million dollars unallocated;

(C) Not later than December 31, 2009 and December 31 of each year thereafter, at least sixty-nine and one-half (69.5) percent of proceeds from auctions, less any amount of revenue refunded pursuant to subsection (j) of this section, shall be transferred to accounts held by Connecticut Light & Power (CL&P) and United Illuminating (UI) and overseen by the Energy Conservation Management Board and to an account held by the Connecticut Municipal Electric Energy Cooperative (CMEEC). Seventy five (75) percent of such proceeds shall be distributed to the CL&P account, eighteen and three-fourths (18.75) percent shall be distributed to the UI account and six and one-fourth (6.25) percent shall be distributed to the CMEEC account. Such proceeds shall be used to support the development of energy efficiency measures; and

(D) CMEEC shall provide a full accounting of the use of funds transferred to the CMEEC account in accordance with the provisions of subparagraph (C) of this subdivision. Such accounting shall be submitted in the form of a to the commissioner, the chairperson of the Department of Public Utility Control, the chairpersons of the Energy Conservation and Management Board and the chief elected officials in any municipality served by CMEEC municipal utilities no later than March 31, 2010 and annually thereafter through the year following the date of the final expenditure of any funds received pursuant to subparagraph (C) of this subdivision.

(6) Retirement of Allowances for Clean Energy Purchases. The commissioner shall permanently retire a number of CO_2 allowances from the Voluntary Clean Energy Purchase Set-aside Account based upon documented voluntary renewable energy purchases by customers in Connecticut that represent RECs sold through the Connecticut Clean Energy Options program or renewable energy generated from within any participating state. Any retirement of allowances shall be determined as follows:

(A) The commissioner shall retire the number of CO_2 allowances equal to the amount determined by the following equation (rounded to the nearest whole ton), subject to the limitations in subparagraph (B) of this subdivision and the requirements of subparagraphs (E) and (F) of this subdivision:

$(MWH_{CCEO} + MWH_{RECS})$ x (0.554 tons CO_2 / MWh)

Where:

MWH_{CCEO} = the total number of RECs sold (in MWhs) to Connecticut customers through the Connecticut Clean Energy Options program in the year prior to the vintage year of the CO_2 allowances to be retired;

MWH_{RECS} = the total number of RECs from renewable energy sources located within any participating state sold (in MWhs) to Connecticut customers through means other than the Connecticut Clean Energy Options program in the year prior to the vintage year of the CO_2 allowances to be retired;

(B) If the total number of allowances calculated to be retired pursuant to subparagraph (A) of this subdivision exceeds the number of CO_2 allowances held in the Voluntary Clean Energy Purchase Set-aside Account, then the number of CO_2 allowances to be retired shall be equal to the total number of CO_2 allowances allocated in the Voluntary Clean Energy Purchase Set-aside Account pursuant to subdivision (3)(A) of this subsection;

(C) If the total number of allowances calculated to be retired pursuant to subparagraph (A) of this subdivision is less than the number of CO_2 allowances held in the Voluntary Clean Energy Purchase Set-aside Account, then allowances from the Voluntary Clean Energy Purchase Set-aside Account not allocated for a vintage year shall be transferred to the Connecticut Auction Account, from which such allowances shall be auctioned in accordance with subdivision (4) of this subsection;

(D) Not later than October 1, 2009 and October 1 of each year thereafter, the commissioner shall retire the number of allowances determined pursuant to subparagraphs (A) and (B) of this subdivision by transferring them to the Connecticut CO_2 Allowance Retirement Account;

(E) Data for the total number of RECs sold to Connecticut customers through the Connecticut Clean Energy Options program required for the equation specified in subparagraph (A) of this subdivision shall be obtained from the Department of Public Utility Control;

(F) Not later than June 30, 2009 and June 30 of each year thereafter, information required for the equation specified in subparagraph (A) of this subdivision relating to the number of RECs from renewable energy sources located within any participating state sold to Connecticut customers through means other than the Connecticut Clean Energy Options program in the previous year may be submitted by the retail provider that sold such RECs. Such information shall also include:

(i) Documentation that the retail provider procured the renewable energy or renewable energy attributes related to voluntary renewable energy or renewable energy attribute credit;

(ii) The time period when the retail purchase or purchases were made;

(iii) The state where the REC was created, including documentation of facility name, unique generator identification number and fuel type; and

(iv) Any additional information required by the commissioner necessary to demonstrate that such REC purchase is not being credited in more than one participating state.

(7) Early reduction CO_2 allowances. For the purposes of this subdivision, the baseline period shall be defined as calendar years 2003, 2004 and 2005, and the early reduction period shall be defined as calendar years 2006, 2007 and 2008. The

commissioner may award early reduction CO allowances to a CO_2 budget source for reductions in the CO_2 budget source's CO_2 emissions, including all emissions from CO_2 budget units at the CO_2 budget source, that are achieved by the source during the early reduction period of 2006, 2007 and 2008, subject to the following requirements:

(A) The owner or operator of the CO_2 budget source shall submit its application for the award of CO_2 allowances not later than May 1, 2009;

(B) The owner or operator of the CO_2 budget source shall demonstrate that all CO_2 budget units that existed at the CO_2 budget source during the baseline period are included as CO_2 budget units for the early reduction period. New CO_2 budget units added at the CO_2 budget source shall also be accounted for during the early reduction period;

(C) The owner or operator of the CO_2 budget source shall demonstrate that the data submitted in support of the early reduction application was recorded in compliance with the requirements of subsection (i) of this section for each of the baseline period years, and also for the early reduction period years, for which the CO_2 budget source was required to report CO_2 data pursuant to 40 CFR 75. An owner or operator of a CO_2 budget source that was not required to submit CO_2 data pursuant to 40 CFR 75 for any of the years contained in the baseline period or early reduction period may request, as part of its application to the commissioner under this subsection, to use an alternative data source or sources for the calculation of early reduction allowances;

(D) The commissioner shall calculate the number of early reduction CO_2 allowances to be awarded to a particular CO_2 budget source pursuant to the following formula:

(i) If total heat input to all CO_2 budget units at the CO_2 budget source during the early reduction period is less than or equal to the total heat input to all the CO_2 budget units at the CO_2 budget source during the baseline period, then:

$$ERAs = ((AEER_{BASELINE} - AEER_{ERP}) \times (EO_{ERP} + (TO_{ERP} / 3.413)))/2000$$

Where:

ERAs are early reduction CO_2 allowances;

$AEER_{BASELINE}$ is the average CO_2 emissions rate resulting from electric energy output and thermal energy output for all of the CO_2 budget units at the CO_2 budget source during the baseline period (in pounds of CO_2/MWh_{th+e});

$AEER_{ERP}$ is the average CO_2 emissions rate resulting from electric energy output and thermal energy output for all of the CO_2 budget units at the CO_2 budget source during the early reduction period (in pounds of CO_2/ MWh_{th+e});

EO_{ERP} is the total electric energy output from all CO_2 budget units at the CO_2 budget source during the early reduction period (in MWh_e); and

TO_{ERP} is the total useful thermal energy output from all CO_2 budget units at the CO_2 budget source during the early reduction period (in MMBtu);

(ii) For the purposes of this subparagraph, thermal energy output shall be converted to units of MWh by the conversion factor 1 MWh = 3.413 MMBtu;

(iii) For the purposes of this subparagraph, output shall be monitored in accordance with subsection (i) of this section;

(iv) If total heat input to all CO_2 budget units at the CO_2 budget source during the early reduction period is greater than or equal to the total heat input to all the CO_2 budget units at the CO_2 budget source during the baseline period, then:

$$ERAs = E_{BASELINE} - E_{ERP}$$

Where:

ERAs are early reduction CO_2 allowances;

$E_{BASELINE}$ are total CO_2 emissions from all of the CO_2 budget units at the CO_2 budget source during the baseline period (in tons); and

E_{ERP} are total CO_2 emissions from all of the CO_2 budget units at the CO_2 budget source during the early reduction period (in tons); and

(E) Once the commissioner confirms a CO_2 budget source's early reductions of CO_2 emissions, the commissioner shall award the early reduction CO_2 allowances to the CO_2 budget source's compliance account not later than December 31, 2009.

(g) **Allowance Tracking System**

(1) CO_2 Allowance Tracking System accounts.

(A) Nature and function of compliance accounts. Consistent with subdivision (2)(A) of this subsection, the commissioner shall establish one compliance account for each CO_2 budget source. Allocations of CO_2 allowances pursuant to subsection (f) of this section and deductions or transfers of CO_2 allowances pursuant to subdivisions (5) or (7) of this subsection or subsections (e)(2) or (h) of this section shall be recorded in the compliance accounts in accordance with this subsection; and

(B) Nature and function of general accounts. Consistent with subdivision (2)(B) of this subsection, the commissioner shall establish, upon request, a general account for any person. Transfers of CO_2 allowances pursuant to subsection (h) of this section shall be recorded in the general account in accordance with this subsection.

(2) Establishment of accounts.

(A) Compliance accounts. Upon receipt of a complete account certificate of representation under subsection (c)(4) of this section, the commissioner shall establish a compliance account for each CO_2 budget source for which the account certificate of representation was submitted;

(B) General accounts. Any person may apply to open a general account for the purpose of holding and transferring CO_2 allowances. Such application shall:

(i) Designate only one CO_2 authorized account representative and only one alternate CO_2 authorized account representative who may act on behalf of the CO_2 authorized account representative; and

(ii) Include a procedure for authorizing the alternate CO_2 authorized account representative to act in lieu of the CO_2 authorized account representative;

(C) A complete application for a general account shall be submitted to the commissioner and shall include the following elements on forms prescribed by the commissioner:

(i) Name, address, electronic mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative and any alternate CO_2 authorized account representative;

(ii) At the option of the CO_2 authorized account representative, organization name and type of organization;

(iii) A list of all persons subject to a binding agreement for the CO_2 authorized account representative or any alternate CO_2 authorized account representative to

represent their ownership interest with respect to the CO_2 allowances held in the general account;

(iv) The following certification statement by the CO_2 authorized account representative and any alternate CO_2 authorized account representative: ''I certify that I was selected as the CO_2 authorized account representative or the CO_2 alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CO_2 allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO_2 Budget Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the commissioner or a court regarding the general account.'';

(v) The signature of the CO_2 authorized account representative and any alternate CO_2 authorized account representative and the dates signed; and

(vi) Unless otherwise required by the commissioner, documents of agreement referred to in the application for a general account shall not be submitted to the commissioner. The commissioner shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted;

(D) Authorization of CO_2 authorized account representative. Upon receipt by the commissioner of a complete application for a general account under subparagraph (C) of this subdivision:

(i) The commissioner shall establish a general account for the person or persons for whom the application is submitted;

(ii) The CO_2 authorized account representative and any alternate CO_2 authorized account representative for the general account shall represent and, by such representations, actions, inactions or submissions, legally bind each person who has an ownership interest with respect to CO_2 allowances held in the general account in all matters pertaining to the CO_2 Budget Trading Program, notwithstanding any agreement between the CO_2 authorized account representative or any alternate CO_2 authorized account representative and such person. Any such person shall be bound by any order or decision issued to the CO_2 authorized account representative or any alternate CO_2 authorized account representative by the commissioner or a court regarding the general account; and

(iii) Any representation, action, inaction or submission by any alternate CO_2 authorized account representative shall be deemed to be a representation, action, inaction or submission by the CO_2 authorized account representative;

(E) Each submission concerning the general account shall be submitted, signed and certified by the CO_2 authorized account representative or any alternate CO_2 authorized account representative for the persons having an ownership interest with respect to CO_2 allowances held in the general account. Each such submission shall include the following certification statement by the CO_2 authorized account representative or any alternate CO_2 authorized account representative:

''I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CO_2 allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting

required statements and information, including the possibility of fine or imprisonment.''

(F) The commissioner shall accept or act on a submission concerning the general account only if the submission has been made, signed and certified in accordance with subparagraph (E) of this subdivision;

(G) Changing CO_2 authorized account representative and alternate CO_2 authorized account representative; changes in persons with ownership interest.

(i) The CO_2 authorized account representative for a general account may be changed at any time upon receipt by the commissioner of a superseding complete application for a general account under subparagraph (B) of this subdivision of this subsection. Notwithstanding any such change, all representations, actions, inactions and submissions by the previous CO_2 authorized account representative or the previous alternate CO_2 authorized account representative prior to the time and date when the commissioner receives the superseding application for a general account shall be binding on the new CO_2 authorized account representative and the persons with an ownership interest with respect to the CO_2 allowances in the general account; and

(ii) The alternate CO_2 authorized account representative for a general account may be changed at any time upon receipt by the commissioner of a superseding complete application for a general account under subparagraph (B) of this subdivision of this subsection. Notwithstanding any such change, all representations, actions, inactions and submissions by the previous CO_2 authorized account representative or the previous alternate CO_2 authorized account representative prior to the time and date when the commissioner receives the superseding application for a general account shall be binding on the new alternate CO_2 authorized account representative and the persons with an ownership interest with respect to the CO_2 allowances in the general account;

(H) In the event a new person having an ownership interest:

(i) With respect to CO_2 allowances in the general account is not included in the list of such persons in the application for a general account, such new person shall be deemed to be subject to and bound by the application for a general account, the representations, actions, inactions and submissions of the CO_2 authorized account representative and any alternate CO_2 authorized account representative of the source, and the decisions, orders, actions and inactions of the commissioner, as if the new individual were included in such list; and

(ii) Not later than 30 days following any change in the persons having an ownership interest with respect to CO_2 allowances in the general account, including the addition of persons, the CO_2 authorized account representative or any alternate CO_2 authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the CO_2 allowances in the general account to include the change;

(I) Objections concerning CO_2 authorized account representative.

(i) Once a complete application for a general account under subparagraph (C) of this subdivision has been submitted and received, the commissioner shall rely on such application unless and until the commissioner receives a superseding complete application for a general account under subparagraph (C) of this subdivision; and

(ii) Except as provided in subparagraphs (G)(i) and (ii) of this subdivision, no objection or other communication submitted to the commissioner concerning the authorization, or any representation, action, inaction or submission of the CO_2 authorized account representative or any alternate CO_2 authorized account representa-

tive for a general account shall affect any representation, action, inaction or submission of the CO_2 authorized account representative or any alternate CO_2 authorized account representative or the finality of any decision or order by the commissioner under the CO_2 Budget Trading Program; and

(J) Account identification. The commissioner shall assign a unique identification number to each account established under subparagraph (A) or (B) of this subdivision.

(3) CO_2 Allowance Tracking System responsibilities of CO_2 authorized account representative. Following the establishment of a CO_2 Allowance Tracking System account, all submissions to the commissioner pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CO_2 allowances in the account, shall be made only by the CO_2 authorized account representative for the account.

(4) Recordation of CO_2 allowance allocations.

(A) Not later than January 1, 2009, the commissioner shall record in the Connecticut Auction Account, the CHP Useful Thermal Energy Set-aside Account, the CHP Long-term PPA Set-aside Account and the Voluntary Clean Energy Purchase Set-aside Account the CO_2 allowances for the allocation years of 2009, 2010, 2011, and 2012;

(B) Not later than January 1, 2010 and January 1 of each year thereafter, the commissioner shall record in the Connecticut Auction Account, the CHP Useful Thermal Energy Set-aside Account, the CHP Long-term PPA Set-aside Account and the Voluntary Clean Energy Purchase Set-aside Account the CO_2 allowances for the allocation year that commences three years after such applicable deadline for recordation;

(C) Not later than April 1, 2009 and April 1 of each year thereafter, the commissioner shall record any CO_2 allowances allocated pursuant to subsections (f)(3)(B) and (f)(3)(C) of this section in the CO_2 budget source's compliance account;

(D) Not later than February 28, 2009 and February 28 of each year thereafter, the commissioner shall record any CO_2 allowances allocated pursuant to subsections (f)(3)(O) and (f)(3)(P) of this section in the CO_2 budget source's compliance account;

(E) Not later than June 15, 2009 and June 15 of each year thereafter, the commissioner shall record any CO_2 allowances sold pursuant to subsections (f)(3)(F) to (f)(3)(L), inclusive, of this section in the CO_2 budget source's compliance account;

(F) Not later than October 1, 2009 and October 1 of each year thereafter, the commissioner shall record any CO_2 allowances retired pursuant to subsection (f)(6) of this section in the Connecticut CO_2 Allowance Retirement Account;

(G) Not later than seven business days of the results of an auction conducted pursuant to subsection (f)(4) of this section being deemed final by the commissioner, the commissioner or the commissioner's trustee shall record CO_2 allowances purchased from the Connecticut Auction Account;

(H) Not later than December 31, 2009, the commissioner shall record any early reduction CO_2 allowances awarded pursuant to subsection (f)(7) of this section in the CO_2 budget source's compliance account; and

(I) Serial numbers for allocated CO_2 allowances. When allocating CO_2 allowances to and recording them in an account, the commissioner shall assign each CO_2 allowance a unique identification number that shall include digits identifying the year for which the CO_2 allowance is allocated.

(5) Compliance.

(A) Allowances available for compliance deduction. CO_2 allowances that meet the following criteria are available to be deducted in order for a CO_2 budget source to comply with the requirements of subsection (b)(3) of this section for a control period.

(i) The CO_2 allowances are of allocation years that fall within a prior control period or the same control period for which the allowances will be deducted; and

(ii) The CO_2 allowances are held in the CO_2 budget source's compliance account as of the CO_2 allowance transfer deadline for that control period or are transferred into the compliance account by a CO_2 allowance transfer correctly submitted for recordation under subsection (h)(1) of this section by the CO_2 allowance transfer deadline for that control period;

(B) For CO_2 offset allowances, the number of CO_2 offset allowances that are available to be deducted in order for a CO_2 budget source to comply with the requirements of subsection (b)(3) of this section for a control period may not exceed the number of tons representing the following percentages of the CO_2 budget source's CO_2 emissions for that control period as determined in accordance with subsection (i) of this section:

(i) Unless the provisions of clause (ii) or (iii) of this subparagraph apply, three and three-tenths (3.3) percent;

(ii) If the commissioner determines that there has been a Stage One Trigger Event, five (5) percent; or

(iii) If the commissioner determines that there has been a Stage Two Trigger Event, ten (10) percent;

(C) CO_2 allowances are not necessary for deductions for excess emissions for a prior control period under subparagraph (G) of this subdivision;

(D) Deductions for compliance. Following the recordation, in accordance with subsection (h)(2) of this section, of CO_2 allowance transfers submitted for recordation in the CO_2 budget source's compliance account by the CO_2 allowance transfer deadline for a control period, the commissioner shall deduct CO_2 allowances available under subparagraph (A) of this subdivision to cover the source's CO_2 emissions, as determined in accordance with subsection (i) of this section, for the control period, as follows:

(i) Until the amount of CO_2 allowances deducted equals the number of tons of total CO_2 emissions, less any CO_2 emissions attributable to the burning of eligible biomass, determined in accordance with subsection (i) of this section, from all CO_2 budget sources at the CO_2 budget source for the control period; or

(ii) If there are insufficient CO_2 allowances to complete the deductions in subparagraph (B)(i) of this subdivision, until no more CO_2 allowances available under subparagraph (A) of this subdivision remain in the compliance account;

(E) Identification of CO_2 allowances by serial number. The CO_2 authorized account representative for a source's compliance account may request that specific CO_2 allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with subparagraph (B), or (D) of this subdivision. Such identification shall be made in the compliance certification report submitted in accordance with subsection (e)(1) of this section;

(F) The commissioner shall deduct CO_2 allowances for a control period from the CO_2 budget source's compliance account, in the absence of an identification or in the case of a partial identification of CO_2 allowances by serial number under subparagraph (E) of this subdivision, in the following descending order:

(i) Any CO_2 allowances, other than CO_2 offset allowances, that are available for deduction under subparagraph (A) of this subdivision and were allocated to the units at the source, in the order of recordation;

(ii) Any CO_2 allowances, other than CO_2 offset allowances, that are available for deduction under subparagraph (A) of this subdivision and were allocated other than to units at the source and transferred and recorded in the compliance account pursuant to subsection (h), in the order of recordation; and

(iii) Subject to the relevant compliance deduction limitations under subdivision (5) of this subsection, any CO_2 allowances that were awarded as CO_2 offset allowances and transferred and recorded in the compliance account pursuant to subsection (h) of this section, in order of recordation;

(G) Deductions for excess emissions. After making the deductions for compliance under subparagraph (D) of this subdivision, the commissioner shall deduct from the CO_2 budget source's compliance account a number of CO_2 allowances, from allocation years that occur after the control period in which the source has excess emissions, equal to three times the number of the source's excess emissions. No CO_2 offset allowances shall be deducted to account for the source's excess emissions. Any such CO_2 allowance deduction shall not affect the liability of the owners and operators of the CO_2 budget source or the CO_2 budget sources at the source for any fine, penalty or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under applicable state law. When assessing fines, penalties or other obligations, the commissioner shall:

(i) Consider each day in the control period a day in violation when determining the number of days of violation if a CO_2 budget source has excess emissions for a control period unless the owner or operator of the source demonstrates that a lesser number of days should be considered; and

(ii) Consider each ton of excess emissions as a separate violation;

(H) The commissioner shall record in the appropriate compliance account all deductions from such an account pursuant to subparagraphs (D) and (G) of this subdivision; and

(I) Action by the commissioner on submissions. The commissioner may review and conduct independent audits concerning any submission under the CO_2 Budget Trading Program and make appropriate adjustments of the information in the submissions, including but not limited to, deductions of CO_2 allowances from or transfer of CO_2 allowances to a source's compliance account based on information in any such submissions.

(6) Banking. Each CO_2 allowance that is held in a compliance account or a general account shall remain in such account unless and until the CO_2 allowance is deducted or transferred under subdivision (5) or (7) of this subsection and under subsection (e)(2), or (h) of this section.

(7) Account error. The commissioner may correct any error in any CO_2 Allowance Tracking System account. Not later than ten (10) business days of making such correction, the commissioner shall notify the CO_2 authorized account representative for the account.

(8) Closing of general accounts. The commissioner may close a general account for one of the following reasons:

(A) A CO_2 authorized account representative of a general account may instruct the commissioner to close the account by submitting a statement requesting deletion of the account from the CO_2 Allowance Tracking System and by correctly submitting for recordation under subsection (h)(1) of this section a CO_2 allowance transfer of all CO_2 allowances in the account to one or more other CO_2 Allowance Tracking System accounts; or

(B) If a general account shows no activity for a period of six years or more and does not contain any CO_2 allowances, the commissioner may notify the CO_2 author-

ized account representative for the account that the account shall be closed and deleted from the CO_2 Allowance Tracking System following twenty business days after the notice is sent. The account shall be closed after the twenty day period unless before the end of such twenty day period the commissioner receives a correctly submitted transfer of CO_2 allowances into the account under subsection (h)(1) of this section or a statement submitted by the CO_2 authorized account representative demonstrating to the satisfaction of the commissioner good cause as to why the account should not be closed.

(h) **CO_2 Allowance Transfers**

(1) Submission of CO_2 allowance transfers. The CO_2 authorized account representatives seeking recordation of a CO_2 allowance transfer shall submit the transfer to the commissioner. The CO_2 allowance transfer shall include the following information:

(A) The numbers identifying both the transferor and transferee accounts;

(B) A specification by serial number of each CO_2 allowance to be transferred; and

(C) The printed name and signature of the CO_2 authorized account representative of the transferor account and the date signed.

(2) Recordation.

(A) Not later than five (5) business days of receiving a CO_2 allowance transfer, except as provided in subparagraph (B) of this subdivision, the commissioner shall record a CO_2 allowance transfer by moving each CO_2 allowance from the transferor account to the transferee account as specified by the request, provided that:

(i) The transfer is correctly submitted under subdivision (1) of this subsection; and

(ii) The transferor account includes each CO_2 allowance identified by serial number in the transfer;

(B) A CO_2 allowance transfer into or out of a compliance account that is submitted for recordation following the CO_2 allowance transfer deadline and that includes any CO_2 allowances that are of allocation years that fall within a control period prior to or the same as the control period to which the CO_2 allowance transfer deadline applies shall not be recorded until after completion of the process pursuant to subsection (g)(5)(D) of this section; and

(C) Where a CO_2 allowance transfer submitted for recordation fails to meet the requirements of subparagraph (A) of this subdivision, the commissioner shall not record such transfer.

(3) Notification.

(A) Notification of recordation. Not later than five (5) business days of recordation of a CO_2 allowance transfer under subdivision (2) of this subsection, the commissioner shall notify each party to the transfer. Notice shall be given to the CO_2 authorized account representatives of both the transferor and transferee accounts;

(B) Notification of non-recordation. Not later than ten (10) business days of receipt of a CO_2 allowance transfer that fails to meet the requirements of subdivision (2)(A) of this subsection, the commissioner shall notify the CO_2 authorized account representatives of both accounts subject to the transfer of:

(i) A decision not to record the transfer; and

(ii) The reasons for such non-recordation; and

(C) Nothing in this section shall preclude the submission of a CO_2 allowance transfer for recordation following notification of non-recordation.

(i) **Monitoring and Reporting**

(1) For the purposes of this subsection the definitions in subsection (a) of this section and in 40 CFR 72.2 shall apply. The terms ''affected unit'' and ''designated representative'' in 40 CFR 75 shall be replaced by the terms ''CO_2 budget unit'',

and ''CO_2 authorized account representative'', respectively, as defined in subsection (a) of this section, except as otherwise provided. The definition of ''continuous emission monitoring system'' or ''CEMS'' in 40 CFR 75 shall be replaced with the definition in subsection (a) of this section. If a CO2 budget unit is not subject to an acid rain emissions limitation, the term ''Administrator'' shall be replaced by the term ''commissioner'' as defined in subsection (a) of this section.

(2) The owner or operator and, to the extent applicable, the CO_2 authorized account representative of a CO_2 budget source shall comply with the monitoring, recordkeeping and reporting requirements as provided in this subsection. The owner or operator of a CO_2 budget source shall comply with the monitoring, recordkeeping and reporting requirements set forth in 40 CFR 75 applicable to CO_2 mass emissions. The owner or operator of a CO_2 budget unit who monitors a non-CO_2 budget unit pursuant to the common, multiple, or bypass stack procedures in 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16 (b)(2)(ii)(B) as pursuant to 40 CFR 75.13, for purposes of complying with this section, shall monitor and report CO_2 mass emissions from such non-CO_2 budget unit according to the procedures for CO_2 budget units established in subdivisions (2) to (8), inclusive, of this subsection.

(A) Requirements for installation, certification, and data accounting. The owner or operator of each CO_2 budget source shall:

(i) Install all monitoring systems necessary to monitor CO_2 mass emissions in accordance with 40 CFR 75, except for equation G-1. Equation G-1 in Appendix G of 40 CFR 75 shall not be used to determine CO_2 emissions under this section. This may require systems to monitor CO_2 concentration, stack gas flow rate, O_2 concentration, heat input and fuel flow rate;

(ii) Successfully complete all certification tests required under this subsection and meet all other requirements of this subsection and 40 CFR 75 applicable to the monitoring systems installed under subparagraph (A)(i) of this subdivision; and

(iii) Make and keep records, report and test for quality assurance of the data from the monitoring systems installed under subparagraph (A)(i) of this subdivision;

(B) Compliance dates. The owner or operator shall meet the monitoring system certification and other requirements of subparagraphs (A)(i) to (A)(iii), inclusive, of this subdivision on or before the following dates:

(i) The owner or operator of a CO_2 budget source who intends to apply for early reduction allowances under subsection (f)(7) of this section shall demonstrate that the data submitted in support of the early reduction application was recorded in compliance with the requirements of this subsection for all of the early reduction years for which the CO_2 budget source was required to report CO_2 data pursuant to 40 CFR 75. A CO_2 budget source that was not required to submit CO_2 data pursuant to 40 CFR 75 for any of the years contained in the early reduction application may petition the commissioner as part of its application under subsection (f)(7) of this section for the use of an alternative data source or sources for the calculation of early reduction allowances;

(ii) The owner or operator of a CO_2 budget source, except for a CO_2 budget source under clause (i) of this subparagraph, that commences commercial operation before July 1, 2008, shall comply with the requirements of this subsection not later than January 1, 2009;

(iii) The owner or operator of a CO_2 budget source that commences commercial operation on or after July 1, 2008, shall comply with the requirements of this subsection by the later of January 1, 2009, or one hundred and eighty (180) calendar days after the date on which the source commences commercial operation; and

(iv) For the owner or operator of a CO_2 budget source for which construction of a new stack or flue installation is completed after the applicable deadline under clauses (i), (ii) or (iii) of this subparagraph by the earlier of ninety (90) source operating days after the date on which emissions first exit to the ambient air through the new stack or flue or one hundred and eighty (180) calendar days after the date on which emissions first exit to the ambient air through the new stack or flue;

(C) Reporting data.

(i) An owner or operator of a CO_2 budget source who misses the certification deadline under subparagraph (B)(i) of this subdivision shall not be eligible to apply for early reduction allowances and shall become subject to the certification deadline under subparagraph (B)(ii) of this subdivision;

(ii) Except as provided in clause (iii) of this subparagraph, the owner or operator of a CO_2 budget source that does not meet the applicable compliance date set forth in subparagraphs (B)(ii) and (B)(iii) of this subdivision for any monitoring system under subparagraph (A) of this subdivision shall, for each such monitoring system, determine, record and report maximum potential or, as appropriate, minimum potential, values for CO_2 concentration, CO_2 emission rate, stack gas moisture content, fuel flow rate, heat input and any other parameter required to determine CO_2 mass emissions in accordance with 40 CFR 75.31(b)(2) or 40 CFR 75.31(c)(3), 40 CFR 75, Appendix section 2.4 or 40 CFR 75 Appendix E;

(iii) The owner or operator of a CO_2 budget source that does not meet the applicable compliance date set forth in subparagraph (B)(iv) of this subdivision for any monitoring system under subparagraph (A)(i) of this subdivision shall, for each such monitoring system, determine, record and report substitute data using the applicable missing data procedures in 40 CFR 75, Subpart D, or 40 CFR 75, Appendix D or E, in lieu of the maximum potential or, as appropriate, minimum potential, values for a parameter if the owner or operator demonstrates that there is continuity between the data streams for that parameter before and after the construction of a new stack or flue installation under subparagraph (B)(iv) of this subdivision;

(iv) CO_2 budget units subject to an acid rain emissions limitation or to section 22a-174-22c of the Regulations of Connecticut State Agencies that qualify for the optional SO_2, NO_X, and CO_2 emissions calculations for low mass emissions (LME) units, as applicable, under 40 CFR 75.19 and report emissions for such programs using the calculations provided in 40 CFR 75.19, shall also use the CO_2 emissions calculations for LME units under 40 CFR 75.19 for purposes of demonstrating compliance with this section;

(v) CO_2 budget units subject to an acid rain emissions limitation or to section 22a-174-22c of the Regulations of Connecticut State Agencies that do not qualify for the optional SO_2, NO_X, and CO_2 emissions calculations for LME units, as applicable, under 40 CFR 75.19, shall not use the CO_2 emissions calculations for LME units under 40 CFR 75.19 for purposes of demonstrating compliance with this section; and

(vi) CO_2 budget units not subject to an acid rain emissions limitation or to section 22a-174-22c of the Regulations of Connecticut State Agencies shall qualify for the optional CO_2 emissions calculation for LME units under 40 CFR 75.19, provided that such units emit less than 100 tons of NO_X annually and no more than 25 tons of SO_2 annually;

(D) Prohibitions. No owner or operator of a CO_2 budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with subsection (i)(6) of this section;

(E) No owner or operator of a CO_2 budget unit shall operate the source so as to discharge, or allow to be discharged, CO_2 emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this subsection and 40 CFR 75;

(F) No owner or operator of a CO_2 Budget unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording CO_2 mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing or maintenance is performed in accordance with the applicable provisions of this subsection and 40 CFR 75; and

(G) No owner or operator of a CO_2 budget unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system under this subsection, except under any one of the following circumstances:

(i) The owner or operator is monitoring emissions from the source with another certified monitoring system approved by the permitting authority, in accordance with the applicable provisions of this subsection and 40 CFR 75, for use at that source that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(ii) The CO_2 authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with subparagraph (B)(ii) of this subdivision.

(3) Initial certification and recertification procedures.

(A) The owner or operator of a CO_2 Budget source shall be exempt from the initial certification requirements of this section for a monitoring system under subdivision (2)(A)(i) of this subsection if the following conditions are met:

(i) The monitoring system has been previously certified in accordance with 40 CFR 75; and

(ii) The applicable quality-assurance and quality-control requirements of 40 CFR 75.21 and 40 CFR 75 Appendices B, D, and E are fully met for the certified monitoring system described in subdivision (2)(A) of this subsection;

(B) Continuous emission monitoring systems required under this section include, but are not limited to, the following:

(i) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour;

(ii) A nitrogen oxides emission rate or NOx-diluent monitoring system, consisting of a NO_x pollutant concentration monitor, a diluent gas monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NOx concentration, in parts per million, diluent gas concentration, in percent CO_2 or O_2; and NO_x emission rate, in lb/MMBtu;

(iii) A moisture monitoring system, as described in 40 CFR 75.11(b)(2), which provides a permanent, continuous record of the stack gas moisture content, in percent H_2O;

(iv) A carbon dioxide monitoring system, consisting of a CO_2 pollutant concentration monitor, or an oxygen monitor plus suitable mathematical equations from which the CO_2 concentration is derived, and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and

(v) An oxygen monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2 in percent O_2;

(C) The recertification provisions of this section shall apply to a monitoring system under subdivision (2)(A) of this subsection exempt from initial certification requirements under subparagraph (A) of this subdivision;

(D) If the Administrator has previously approved a petition under 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16(b)(2)(ii)(B) as pursuant to 40 CFR 75.13, for apportioning the CO_2 emission rate measured in a common stack or a petition under 40 CFR 75.66 of this chapter for an alternative requirement in 40 CFR 75, the CO_2 authorized account representative shall submit the petition to the commissioner under subdivision (7)(A) of this subsection to determine whether the Administrator's approval applies under this program;

(E) Except as provided in subparagraph (A) of this subdivision, the owner or operator of a CO_2 budget source shall comply with the following initial certification and recertification procedures for a continuous emission monitoring system and an excepted monitoring system under 40 CFR 75, Appendices D and E, and under subdivision (2)(A)(i) of this subsection. The owner or operator of a source that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR 75.19 or that qualifies to use an alternative monitoring system under 40 CFR 75, Subpart E, shall comply with the procedures in subparagraph (A) or (B)(iv) of this subdivision;

(F) Requirements for initial certification. The owner or operator shall ensure that each continuous emissions monitoring system required under subdivision (2)(A)(i) of this subsection completes all of the initial certification testing required under 40 CFR 75.20 by the applicable deadlines specified in subdivision (2)(B) of this subsection. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this subsection in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required;

(G) Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in a certified continuous emission monitoring system under subdivision (2)(A)(i) of this subsection that the Administrator or the commissioner determines significantly affects the ability of the system to accurately measure or record CO_2 mass emissions or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or Appendix B to 40 CFR 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification or change to the flue gas handling system or the source's operation that the Administrator or the commissioner determines to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system in accordance with 40 CFR 75.20(b). Examples of changes that require recertification include, but are not limited to: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients;

(H) Approval process for initial certifications and recertification.

(i) Notification of certification. The CO_2 authorized account representative shall submit to the commissioner a written notice of the dates of certification in accordance with subdivision (5) of this subsection;

(ii) Certification application. The CO_2 authorized account representative shall submit to the commissioner a certification application for each monitoring system.

A complete certification application shall include the information specified in 40 CFR 75.63; and

(iii) Provisional certification data. The provisional certification date for a monitor shall be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitor may be used under the CO_2 Budget Trading Program for a period not to exceed 120 days after receipt by the commissioner of the complete certification application for the monitoring system or component thereof under subparagraph (H)(ii) of this subdivision. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR 75, shall be considered valid quality-assured data, provided that the permitting authority does not invalidate the provisional certification by issuing a notice of disapproval not later than 120 days of receipt of the complete certification application by the commissioner;

(I) Certification application approval process. The commissioner shall issue a written notice of approval or disapproval of the certification application to the owner or operator not later than 120 days of receipt of the complete certification application in accordance with subparagraph (H)(ii) of this subdivision. In the event the commissioner does not issue such a notice not later than such 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR 75 and is included in the certification application shall be deemed certified for use under the CO_2 Budget Trading Program.

(i) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the commissioner shall issue a written notice of approval of the certification application not later than 120 days of receipt of such complete application;

(ii) Incomplete application notice. If the certification application is not complete, then the commissioner shall issue a written notice of incompleteness and set a reasonable date by which the CO_2 authorized account representative shall submit the additional information required to complete the certification application. The commissioner may issue a notice of disapproval under subparagraph (I)(iii) of this subdivision if the CO_2 authorized account representative does not comply with the notice of incompleteness by the specified date. The 120 day review period shall not begin before receipt of a complete certification application;

(iii) Disapproval notice. If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of 40 CFR 75, or if the certification application is incomplete and the requirement for disapproval under subparagraph (I)(ii) of this subdivision is met, then the commissioner shall issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification shall no longer be valid and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in subparagraph (J) of this subdivision for each monitoring system or component thereof, which is disapproved for initial certification; and

(iv) Audit decertification. The commissioner may issue a notice of disapproval of the certification status of a monitor in accordance with subdivision (4)(B) of this subsection;

(J) Procedures for loss of certification. If the commissioner issues a notice of disapproval of a certification application under subparagraph (I)(iii) of this subdivi-

sion or a notice of disapproval of certification status under subparagraph (I)(iv) of this subdivision, then the owner or operator shall substitute the following values for each disapproved monitoring system, for each hour of source operation during the period of invalid data beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR 75.20(a)(5)(i) or 40 CFR 75.20(g)(7):

(i) For sources using or intending to monitor for CO_2 mass emissions using heat input or for sources using the low mass emission excepted methodology under 40 CFR 75.19, the maximum potential hourly heat input of the source; and

(ii) For sources intending to monitor for CO_2 mass emissions using a CO_2 pollutant concentration monitor and a flow monitor, the maximum potential concentration of CO_2 and the maximum potential flow rate of the source under 40 CFR 75, Appendix A section 2.1;

(K) For each disapproved monitoring system, the CO_2 authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with subparagraphs (H)(i) and (ii) of this subdivision; and the owner or operator shall repeat all certification tests or other requirements, as indicated in the commissioner's notice of disapproval, no later than 30 source operating days after the date of issuance of the notice of disapproval;

(L) Initial certification and recertification procedures for low mass emission. The owner or operator of a source qualified to use the low mass emissions excepted methodology under subdivisions (2)(C)(iv) or (2)(C)(vi) of this subsection shall meet the applicable certification and recertification requirements of 40 CFR 75.19(a)(2), 40 CFR 75.20(h) and subdivision (3) of this subsection. If the owner or operator of such a source elects to certify a fuel flow meter system for heat input determinations, the owner or operator shall also meet the certification and recertification requirements of 40 CFR 75.20(g); and

(M) Certification and recertification procedures for alternative monitoring systems. The CO_2 authorized account of each source for which the owner or operator intends to use an alternative monitoring system approved by the commissioner under 40 CFR 75, Subpart E, shall apply for certification to the commissioner prior to use of the system under the CO_2 Budget Trading Program. The CO_2 authorized account representative shall apply for recertification following a replacement, modification or change according to the procedures in subparagraph (C) of this subdivision. The owner or operator of an alternative monitoring system shall comply with the notification and application requirements for certification according to the procedures specified in subparagraph (H) of this subdivision and 40 CFR 75.20(f).

(4) Out of control periods.

(A) Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75, data shall be substituted using the applicable procedures in 40 CFR 75, Subpart D, Appendix D or E; and

(B) Audit decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under subdivision (3) of this subsection or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the commissioner shall issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this subparagraph, an audit shall

be either a field audit or an audit of any information submitted to the commissioner. By issuing the notice of disapproval, the commissioner shall revoke prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the initial certification or recertification procedures set forth in subdivision (3) of this subsection for each disapproved monitoring system.

(5) Notifications. The CO_2 authorized account representative for a CO_2 budget source shall submit written notice to the commissioner in accordance with 40 CFR 75.61.

(6) Recordkeeping and reporting.

(A) General provisions. The CO_2 authorized account representative shall comply with all recordkeeping and reporting requirements in this section, the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the certification requirements of subsection (c)(1)(E) of this section;

(B) Monitoring plans. The owner or operator of a CO_2 budget source shall comply with requirements of 40 CFR 75.62;

(C) Certification applications. The CO_2 authorized account representative shall submit an application to the commissioner not later than 45 days after completing all initial certification or recertification tests required under subdivision (3) of this subsection including the information required under CFR 75.63 and 40 CFR 75.73 (c) and (e);

(D) Quarterly reports. The CO_2 authorized account representative shall report the CO_2 mass emission data for the CO_2 budget source, in an electronic format prescribed by the commissioner for each calendar quarter as follows:

(i) For a source that commences commercial operation before July 1, 2008, the calendar quarter covering January 1, 2009 to March 31, 2009, inclusive; or

(ii) For a source commencing commercial operation on or after July 1, 2008, the calendar quarter corresponding to, the earlier of the date of provisional certification or the applicable deadline for initial certification under subdivision (2)(B) of this subsection or, unless such quarter is the third or fourth quarter of 2008, in which case reporting shall commence in the quarter covering January 1, 2009 to March 31, 2009, inclusive;

(E) The CO_2 authorized account representative shall submit each quarterly report to the commissioner not later than 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75, Subpart H, and 40 CFR 75.64;

(F) For each CO2 budget unit, or group of units using a common stack, quarterly reports shall include all of the data and information required in 40 CFR 75, Subpart G, except for the provisions concerning opacity, NO_x and SO_2;

(G) Compliance certification. The CO_2 authorized account representative shall submit to the commissioner a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the source's emissions are correctly and fully monitored. The certification shall state that:

(i) The monitoring data submitted were recorded in accordance with the applicable requirements of this subsection and 40 CFR 75, including the quality assurance procedures and specifications;

(ii) For a source with add-on CO_2 emission controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance quality control program under 40 CFR 75, Appendix B and the substitute values do not systematically underestimate CO_2 emissions; and

(iii) The CO_2 concentration values substituted for missing data under 40 CFR 75, Subpart D do not systematically underestimate CO_2 emissions;

(7) Petitions.

(A) Except as provided in subparagraph (B) of this subdivision, the CO_2 authorized account representative of a CO_2 budget unit that is subject to an acid rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66 and to the commissioner requesting approval to apply an alternative to any requirement of 40 CFR Part 75. The application of an alternative to any requirement of 40 CFR Part 75 shall be in accordance with this subsection only if the petition is approved in writing by the Administrator, and subsequently approved in writing by the commissioner;

(B) The CO_2 authorized account representative of a CO_2 budget unit that is subject to an acid rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66 and to the commissioner requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72 or a CO_2 concentration CEMS used under 40 CFR 75.71(a)(2). The application of an alternative to any such requirement shall be in accordance with this subsection only if the petition is approved in writing by the Administrator, and subsequently approved in writing by the commissioner; and

(C) Petitions for a CO_2 budget unit that is not subject to an acid rain emissions limitation.

(i) The CO_2 authorized account representative of a CO_2 budget unit that is not subject to an acid rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66 and to the commissioner requesting approval to apply an alternative to any requirement of 40 CFR 75. The application of an alternative to any requirement of 40 CFR 75 shall be in accordance with this subsection only if the petition is approved in writing by the Administrator, and subsequently approved in writing by the commissioner; and

(ii) In the event that the Administrator declines to review a petition under clause (i) of this subparagraph, the CO_2 authorized account representative of a CO_2 budget unit that is not subject to an acid rain emissions limitation may submit a petition to the commissioner requesting approval to apply an alternative to any requirement of this subsection. That petition shall contain all of the relevant information specified in 40 CFR 75.66. The application of an alternative to any requirement of this subsection shall be in accordance with this subsection only if the petition is approved in writing by the commissioner;

(8) CO_2 budget units that co-fire eligible biomass.

(A) The CO_2 authorized account representative of a CO_2 budget unit that co-fires eligible biomass as a compliance mechanism under this subsection, shall report the following information to the commissioner for each calendar quarter:

(i) For each shipment of solid eligible biomass fuel fired at the CO_2 budget unit, the total eligible biomass fuel input, on an as-fired basis, in pounds;

(ii) For each shipment of solid eligible biomass fuel fired at the CO_2 budget unit, the moisture content, on an as-fired basis, as a fraction by weight;

(iii) For each distinct type of gaseous eligible biomass fuel fired at the CO_2 budget unit, the density of the biogas, on an as-fired basis, in pounds per standard cubic foot;

(iv) For each distinct type of gaseous eligible biomass fuel fired at the CO_2 budget unit, the moisture content of the biogas, as a fraction by total weight;

(v) For each distinct type of gaseous eligible biomass fuel fired at the CO_2 budget unit, the total eligible biomass fuel input, in standard cubic feet;

(vi) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit, the dry basis carbon content of the fuel type, as a fraction by dry weight;

(vii) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit, the dry basis higher heating value, in MMBtu per dry pound;

(viii) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit, the total dry basis eligible biomass fuel input, in pounds, calculated in accordance with subparagraph (B) of this subdivision;

(ix) The total amount of CO_2 emitted from the CO_2 budget unit due to firing eligible biomass fuel, in tons, calculated in accordance with subparagraph (C) of this subdivision;

(x) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit, the total eligible biomass fuel heat input, in MMBtu, calculated in accordance with subparagraph (D)(i) of this subdivision;

(xi) The total amount of heat input to the CO_2 budget unit due to firing eligible biomass fuel, in MMBtu, calculated in accordance with subparagraph (D)(ii) of this subdivision;

(xii) A description and documentation of monitoring technology employed, and a description and documentation of fuel sampling methodology employed, including sampling frequency; and

(xiii) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit, chemical analysis, including heating value and carbon content;

(B) An owner or operator of a CO_2 budget unit shall calculate and submit to the commissioner on a quarterly basis the total dry weight for each distinct type of eligible biomass fired by the CO_2 budget unit during the reporting quarter. The total dry weight shall be determined for each fuel type as follows:

(i) For solid fuel types:

$$F_j = \sum_{i=1}^{m} (1 - M_i) \times F_i$$

Where:

F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j;

F_i = Eligible biomass as fired fuel input (lbs) for fired shipment i;

M_i = Moisture content (fraction) for fired shipment i;

i = Fired fuel shipment;

j = Fuel type; and

m = Number of shipments;

(ii) For gaseous fuel types:

$$F_j = D_j \times V_j \times (1 - M_j)$$

Where:

F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j;

D_j = Density of biogas (lbs/scf) for fuel type j;

V_j = Total volume (scf) for fuel type j;

M_j = Moisture content (fraction) for fuel type j; and

j = Fuel type;

(C) CO_2 emissions due to firing of eligible biomass shall be determined as follows:

(i) For any full calendar quarter during which no fuel other than eligible biomass is combusted at the CO_2 budget unit, as measured and recorded in accordance with subdivisions (1) to (7), inclusive, of this subsection; or

(ii) For any full calendar quarter during which fuels other than eligible biomass are combusted at the CO_2 budget unit, as determined using the following equation:

$$CO_2 \text{ tons} = \sum_{j=1}^{n} F_j \times C_j \times O_j \times 44/12 \times 0.0005$$

Where:

CO_2 tons = CO_2 emissions due to firing of eligible biomass for the reporting quarter;

F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated in subparagraph (B) of this subdivision;

C_j = Carbon fraction (dry basis) for fuel type j;

O_j = Oxidation factor for eligible biomass fuel type j, derived for solid fuels based on the ash content of the eligible biomass fired and the carbon content of this ash, as determined pursuant to subparagraph (A)(xii) of this subdivision; for gaseous eligible biomass fuels, a default oxidation factor of 0.995 may be used;

44/12 = Number of tons of carbon dioxide that are created when one ton of carbon is combusted (44/12);

0.0005 = Number of short tons which is equal to one pound;

j = Fuel type; and

n = Number of distinct fuel types;

(D) Heat input due to firing of eligible biomass for each quarter shall be determined as follows:

(i) For each distinct fuel type:

$$H_j = F_j \times HHV_j$$

Where:

H_j = Heat input (MMBtu) for fuel type j;

F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated in subparagraph (B) of this subdivision;

HHV_j = Higher heating value (MMBtu/lb), dry basis, for fuel type j, as determined through chemical analysis; and

j = Fuel type and

(ii) For all fuel types:

$$\text{Heat Input MMBtu} = \sum_{j=1}^{n} H_j$$

Where:

H_j = Heat input (MMBtu) for fuel type j;

j = Fuel type; and,

n = Number of distinct fuel types; and

(E) Fuel sampling methods and fuel sampling technology shall be consistent with the New York State renewable Portfolio Standard Biomass Guidebook, May 2006.

(9) Additional requirements to provide output data.

(A) Not later than March 1, 2009 and March 1 of each year thereafter, CO_2 budget sources shall submit to the commissioner electricity generation data, in MWhs, associated with operation of CO_2 budget units at the CO_2 budget sources. The following MWh data shall be included, if applicable:

(i) CO_2 budget sources that are required to submit generation data to the Regional ISO shall submit to the commissioner the same CO_2 budget unit-level MWh values submitted to the Regional ISO and a statement certifying that the MWh of electrical output reported reflects the total actual electrical output of the CO_2 budget units at the CO_2 budget source used by the Regional ISO to determine settlement resources of energy market participants;

(ii) CO_2 budget sources that report gross hourly MW data to the Administrator, shall submit to the commissioner an annual summation of the CO_2 budget unit-level gross output data submitted to the Administrator; and

(iii) CO_2 budget sources that do not submit generation data to the Regional ISO or to the Administrator shall submit to the commissioner net electrical output information in accordance with subparagraph (D) of this subdivision. A CO_2 budget source whose electrical output is not used in Regional ISO energy market settlement determinations shall propose to the commissioner a method for quantification of net electrical output;

(B) CO_2 budget sources creating useful thermal energy and selling steam shall use billing meters to determine net steam output. A CO_2 budget source whose steam output is not measured by billing meters or whose steam output is combined with output from a non-CO_2 budget source prior to measurement by the billing meter shall propose to the commissioner an alternative method for quantification of net steam output. If data for steam output is not available, the CO_2 budget source may report heat input providing useful steam output as a surrogate for steam output;

(C) Monitoring. Not later than March 1, 2009, CO_2 budget sources shall provide an output monitoring plan containing the elements described in subparagraphs (D) to (G), inclusive, of this subdivision;

(D) The output monitoring plan submitted by the CO_2 budget source pursuant to subparagraph (C) of this subdivision shall include a diagram of the electrical or steam system for which output is being monitored, specifically including:

(i) For net electric output, the diagram shall contain all CO_2 budget sources and all generators served by each CO_2 budget source and the relationship between CO_2 Budget sources and generators. If a generator served by a CO_2 budget source is also served by a non-affected source, the non-affected source and its relationship to each generator shall be indicated on the diagram as well. The diagram shall indicate where the net electric output is measured and shall include all electrical inputs and outputs to and from the plant. If net electric output is determined using a billing meter, the diagram shall show each billing meter used to determine net sales of electricity and shall show that all electricity measured at the point of sale is generated by the CO_2 budget sources; and

(ii) For net thermal output, the diagram shall include all steam or hot water coming into the net steam system, including steam from CO_2 budget sources and non-affected sources, and all exit points of steam or hot water from the net steam system. In addition, each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system shall identify all useful loads, house loads, parasitic loads, any other steam loads and all boiler feed water returns. The diagram shall represent all energy losses in the system as either usable or unusable losses. The diagram shall also indicate all flow meters, temperature or pressure sensors or other equipment used to calculate gross thermal output. If a sales agreement is used to determine net thermal output, the diagram shall show the monitoring equipment used to determine the sales of steam;

(E) The output monitoring plan submitted by the CO_2 budget source pursuant to subparagraph (C) of this subdivision shall include a description of each output monitoring system. The description of the output monitoring system shall include a written description of the output system and the equations used to calculate output. For net thermal output systems, descriptions and justifications of each useful load shall be included;

(F) The output monitoring plan submitted by the CO_2 budget source pursuant to subparagraph (C) of this subdivision shall include a detailed description of all quality assurance and quality control activities performed to maintain the output system in accordance with subparagraph (M) of this subdivision;

(G) The output monitoring plan submitted by the CO_2 budget source pursuant to subparagraph (C) of this subdivision shall include documentation supporting any output values to be used as a missing data value if there are periods of invalid output data. The missing data output value shall be either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under this section;

(H) Initial Certification. CO_2 authorized account representatives shall submit a certification statement stating that either the output monitoring system consists entirely of billing meters or that the output monitoring system meets one of the accuracy requirements for non-billing meters below. This statement may be submitted with the certification application required pursuant to subdivision (6)(C) of this subsection.

(i) Billing Meters. The billing meter shall record the electric or thermal output. Any electric or thermal output values that the facility reports shall be the same as the values used in billing for the output. Any output measurement equipment used as a billing meter in commercial transactions requires no additional certification or testing requirements;

(ii) Non-Billing Meters. For non-billing meters, the output monitoring system shall either meet an accuracy of ten (10) percent of the reference value, or each

component monitor for the output system shall meet an accuracy of three (3) percent of the full scale value, whichever is less stringent, as determined pursuant to clause (iii) or (iv) of this subparagraph;

(iii) The system approach to accuracy shall include a determination of how the system accuracy of ten (10) percent is achieved using the individual components in the system and shall include data loggers and any watt meters used to calculate the final net electric output data or any flow meters for steam or condensate, temperature measurement devices, absolute pressure measurement devices and differential pressure devices used for measuring thermal energy; or

(iv) A component approach to accuracy. If testing a piece of output measurement equipment shows that the output readings are not accurate to three (3) percent or less of the full scale, then the owner or operator of a CO_2 budget source shall retest or replace the measurement equipment to achieve such level of accuracy. Data shall be considered invalid, prospectively, for purposes of determining allocations. Data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test;

(I) Ongoing quality assurance and quality control. Ongoing quality assurance and quality control activities shall be performed by the owner or operator of a CO_2 budget source in order to maintain the output system, which shall include the following:

(i) Billing Meters. In the case where billing meters are used to determine output, no quality assurance and quality control activities beyond those already performed are required;

(ii) Non-Billing Meters. Certain types of equipment such as potential transformers, current transformers, nozzle and venture type meters, and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed. However, the pressure and temperature transmitters accompanying an orifice plate will require periodic retesting. For other types of equipment, the owner or operator of a CO_2 budget source shall either recalibrate or re-verify the meter accuracy at least once every two years, unless a consensus standard allows for less frequent calibrations or accuracy tests. The system approach to accuracy or a component approach to accuracy shall be in accordance with subparagraphs (H)(ii) to (H)(iv), inclusive, of this subdivision. If testing a piece of output measurement equipment shows that the output readings are not accurate to 3.0 percent or less of the full scale value, then the owner or operator of a CO_2 budget source shall retest or replace the measurement equipment to achieve such level of accuracy; and

(iii) Out of Control Periods. If testing a piece of output measurement equipment shows that the output readings are not accurate to the certification value, data remain valid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes an accuracy test. All invalid data shall be replaced by either zero output or an output value that is likely to be lower than a measured value and that is approved as part of the output monitoring plan under subparagraph (C) of this subdivision; and

(J) Recordkeeping and Reporting. The CO_2 authorized account representative shall comply with all recordkeeping and reporting requirements in this subparagraph and with the requirements of subsections (b)(6) and (c)(1)(E) of this section:

(i) Recordkeeping. The owner or operator of a CO_2 budget source shall retain data used to monitor, determine or calculate net generation for ten (10) years;

(ii) Annual output reports. Not later than March 1, 2009 and March 1 of each year thereafter, the CO_2 authorized account representative shall submit to the com-

missioner an annual output report containing until-level MWh data and all useful thermal output information not later than March 1 for the immediately preceding year; and

(iii) The annual report shall be certified as follows:

''I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 budget sources for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''

(j) **Ratepayer relief.** For purposes of this subsection, ''auction clearing price'' means the specified monetary value assigned to a CO_2 allowance as determined by the bids of buyers in a CO_2 allowance auction held pursuant to subsection (f)(4) of this section.

(1) If the auction clearing price of a CO_2 allowance exceeds the threshold price identified in subdivision (3) of this subsection, the commissioner shall return a portion of the proceeds generated by the auction of CO_2 allowances under subsection (f)(4) of this section to the Department of Public Utility Control for return to Connecticut electric ratepayers. Not later than December 31, 2009 and each year thereafter, the commissioner shall transfer such portion, which shall be calculated in accordance with subdivision (3) of this subsection, to the Department of Public Utility Control.

(2) If the auction clearing price of a CO_2 allowance does not exceed the threshold price identified in subdivision (3) of this subsection, the commissioner shall distribute auction proceeds pursuant to the requirements set forth in subsection (f)(5) of this section.

(3) The amount of proceeds to be transferred to the Department of Public Utility Control shall be determined as follows:

$$R_r = (Q_1 * (A_p - T_p))$$

Where:

R_r = Revenue to be returned to Connecticut electric ratepayers;

Q_1 = Quantity of Connecticut CO_2 allowances sold at auction;

A_p = Auction clearing price for a CO_2 allowance; and

T_p = Threshold price for a CO_2 allowance shall be five dollars multiplied by the ratio of the Consumer Price Index for all-Urban consumers published by the United States Department of Labor, as of August 31 of the previous calendar year to the Consumer Price Index for all-Urban consumers for August 2008.

(k) **Severability.**

Each provision of this section is deemed severable, and in the event that any provision of this section is held to be invalid, the remainder of this section shall continue in full force and effect.

(Adopted effective July 23, 2008)

Sec. 22a-174-31a. Greenhouse gas emission offset projects

(a) **Definitions and abbreviations.** Except as otherwise provided, for the purposes of this section and section 22a-174-31 of the Regulations of Connecticut State Agencies:

(1) ''Anaerobic digester'' means a device that promotes the decomposition of organic material to simple organics and gaseous biogas products, usually accomplished by means of controlling temperature and volume, and including a methane recovery system.

(2) ''Anaerobic digestion'' means the degradation of organic material including manure brought about through the action of microorganisms in the absence of elemental oxygen.

(3) ''Anaerobic storage'' means the storage of organic material in an oxygen-free environment, or under oxygen-free conditions, including but not limited to, holding tanks, ponds, and lagoons.

(4) ''ANSI'' means the American National Standards Institute.

(5) ''ASHRAE'' means the American Society of Heating, Refrigerating and Air-Conditioner Engineers.

(6) ''Biogas'' means the gas, primarily methane and CO_2, resulting from the decomposition of organic matter under anaerobic conditions.

(7) ''Building envelope'' means the elements of a building, including walls, windows, foundation, basement slab, ceiling, roof and insulation, that separate conditioned space from unconditioned space, or that enclose semi-heated space, through which thermal energy may be transferred to or from the exterior, unconditioned space, or conditioned space.

(8) ''Certification'' means an independent third-party verification that a CO_2 emissions offset project application and all measurement, monitoring or verification associated therewith meets the requirements of this section.

(9) ''CH_4'' means methane.

(10) ''CO_2 emissions offset project'' means a project to reduce or avoid atmospheric loading of CO_2, CO_2e or sequestered carbon where such project yields reduced or avoided emissions that are real, additional, verifiable, enforceable and permanent.

(11) ''CO_2e'' means ''carbon dioxide equivalent'' as defined in section 22a-174-31 of the Regulations of Connecticut State Agencies.

(12) ''Commercial building'' means a non-residential building to which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 apply.

(13) ''Conflict of interest'' means a situation under which an individual has a relationship with any specific project sponsor, CO_2 emissions offset project or category of offset projects, such that the individual's other activities or relationships with other persons or organizations render or may render the individual incapable of providing an impartial certification opinion, or otherwise compromise the individual's objectivity in performing certification functions.

(14) ''Condensing mode'' means the design and operation of furnaces or boilers in a mode that leads to the production of condensate in flue gases.

(15) ''Cooperating regulatory agency'' means a regulatory agency in a state or United States jurisdiction that is not a participating state that has entered into a memorandum of understanding with the commissioner and the appropriate regulatory agencies of all participating states to carry out certain obligations relative to CO_2 emissions offset projects in that state or United States jurisdiction, including but

not limited to, the obligation to perform audits of offset project sites, and report noncompliance with this section.

(16) ''Energy conservation measure'' (''ECM'') or ''energy efficiency measure'' (''EEM'') means an activity or a set of activities designed to increase the energy efficiency of a building or improve the management of energy demand and may include, but not be limited to, physical changes to facility equipment, modifications to a building, revisions to operating and maintenance procedures, software changes, or new means of training or managing users of the building or operations and maintenance staff.

(17) ''Energy performance'' means a measure of the relative energy efficiency of a building, building equipment, or building components, as measured by the amount of energy required to provide building services and for building equipment and components, means a relative measure of the impact of equipment or components on building energy usage.

(18) ''Energy services'' means the provision of useful services to building occupants, such as heating and hot water, cooling, and lighting.

(19) ''Forested condition'' means land that is at least 1.0 acre in size and 120.0 feet wide measured stem-to-stem from the outer-most edge with forested strips that are at least 120.0 feet wide for a continuous length of at least 363.0 feet, and meets one of the following stocking criteria:

(A) The condition is at least 10-percent stocked by trees of any size or has been at least 10-percent stocked in the past, and the condition is not subject to non-forest use that prevent normal tree regeneration and succession such as regular mowing, intensive grazing, or recreation activities; or

(B) In several western woodland species where stocking cannot be determined, the condition has at least 5-percent crown cover by trees of any size, or has had at least 5-percent cover in the past, and the condition is not subject to non-forest use that prevents normal regeneration and succession such as regular mowing, chaining, or recreation activities.

(20) ''Furnace'' means a self-contained, indirect-fired appliance with a heat input rate of less than 225,000 Btu/hr that supplies heated air to a residential or commercial building through ducts to conditioned spaces.

(21) ''HVAC system'' means a system or systems that provide, either collectively or individually, heating, ventilation, or air conditioning to a building, including the equipment, distribution network, and terminals.

(22) ''IESNA'' means the Illuminating Engineering Society of North America.

(23) ''Independent verifier'' means an individual who has been approved by the commissioner or the commissioner's designee to conduct verification activities.

(24) ''Market penetration rate'' means a measure of the diffusion of a technology, product, or practice in a defined market, as represented by the percentage of annual sales for a product or practice, as a percentage of the existing installed stock for a product or category of products, or as the percentage of existing installed stock that utilizes a practice.

(25) ''Non-census water'' means streams, sloughs, estuaries, and canals that are more than 120 feet and less than 1/8 of a mile wide and lakes, reservoirs, and ponds that are 1 to 40 acres in size.

(26) ''Non-forested condition'' means land that does not meet the definition of ''forested condition'' and any land that includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining rights-of-way, power line clearings of any width, and non-census water. If intermin-

gled in forested areas, unimproved roads and non-forest strips are more than 120.0 feet wide, and clearings more than one acre in size, to qualify as non-forest land.

(27) ''Offset project'' means all equipment, materials, items, or actions directly related to the reduction of CO_2 equivalent emissions or the sequestration of carbon specified in a consistency application submitted pursuant to this section.

(28) ''On-site combustion'' means the combustion of fossil fuel at a building to provide building services, such as heating, hot water, or electricity.

(29) ''Passive solar'' means a combination of building design features and building components that utilize solar energy to reduce or eliminate the need for mechanical heating and cooling and daytime artificial lighting.

(30) ''Permanently retired'' means a greenhouse gas allowance or credit has been placed in a retirement account controlled by the jurisdiction that generated the allowance or credit, or has been placed in an allowance retirement account controlled by the commissioner or is otherwise determined by the commissioner to be rendered unusable.

(31) ''Project commencement'' means the date on which physical construction, installation of equipment or materials or other work at an offset project site began; or the date on which a management activity or protocol is first utilized for an offset project.

(32) ''Project sponsor'' means any person who owns or operates an eligible CO_2 emission offset project or who owns a CO_2 emissions credit retirement.

(33) ''Regional-type anaerobic digester'' means an anaerobic digester using feedstock from more than one agricultural operation, or importing feedstock from more than one agricultural operation.

(34) ''Renewable portfolio standard'' means the statutory requirement that a load-serving entity provide a certain portion of the electricity it supplies to its customers from renewable energy sources pursuant to section 16-245a of the Connecticut General Statute or any other statute or regulation requiring a certain portion of electricity supplied to the electricity grid be generated from renewable energy sources.

(35) ''Residential building'' means a low-rise structure used as a single family home, a multifamily home of three or fewer stories above grade, or a modular or mobile manufactured home for which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 do not apply.

(36) ''RESNET'' means the Residential Energy Services Network, a not-for-profit corporation that establishes nationally recognized standards for building energy efficiency rating systems.

(37) ''SF_6'' means sulfur hexafluoride.

(38) ''SF_6-containing operating equipment'' means any equipment used for the transmission or distribution of electricity that contains SF_6.

(39) ''System benefit fund'' means the monies collected directly from retail electricity or natural gas ratepayers pursuant to section 16-245*l* of the Connecticut General Statutes or the statutes and regulations of other states.

(40) ''Total solids'' means the total of all solids in a sample, including total suspended solids, total dissolved solids, and volatile suspended solids.

(41) ''Transmission or distribution entity'' means the assets and equipment used to transmit and distribute electricity from an electric generator to the electrical load of a customer, including all related assets and equipment located within the service territory of the entity, defined as the service territory of a load-serving entity specified by the Connecticut Department of Public Utility Control.

(42) ''Verification'' means the determination by an independent verifier that certain parts of a CO_2 emissions offset project consistency application or measurement, monitoring and verification report conform to the requirements of this section.

(43) ''Volatile solids'' means the fraction of total solids that is comprised primarily of organic matter.

(44) ''Whole-building energy performance'' means the overall energy performance of a building, taking into account the integrated impact on energy usage of all building components and systems.

(45) ''Whole-building retrofit'' means any building project that involves the replacement of more than one building system, or set of building components, and also requires a building permit.

(46) ''Zero net energy building'' means a building designed to produce as much energy, using renewable energy sources, as the building is projected to use, as measured on an annual basis.

(b) **Applicability and General Requirements.**

(1) This section applies to the sponsor of any CO_2 emissions offset project undertaken to create CO_2 offset allowances for sale or use in the state of Connecticut in accordance with the requirements of section 22a-174-31 of the Regulations of Connecticut State Agencies or in any other participating state.

(2) Copies of documents incorporated by reference into this section are available by contacting:

Connecticut Department of Environmental Protection
Bureau of Air Management
79 Elm Street
Hartford, Connecticut 06106
(860) 424-3027

(c) **General Requirements for CO_2 Emissions Offset Projects.**

(1) The commissioner or commissioner's designee may award CO_2 offset allowances to sponsors of CO_2 emissions offset projects or CO_2 emissions credit retirements that have reduced or avoided atmospheric loading of CO_2 or CO_2 equivalent or sequestered carbon as demonstrated in accordance with the applicable provisions of this section provided that such projects represent CO_2 or CO_2 equivalent reductions or carbon sequestration that are real, additional, verifiable, enforceable, and permanent. The use of such offset allowances for compliance purposes shall be subject to the provisions of section 22a-174-31 of the Regulations of Connecticut State Agencies.

(2) Eligible CO_2 emissions offset projects. Offset projects shall satisfy all the applicable requirements of this section to qualify for the award of CO_2 offset allowances. As identified in subsections (d) to (h), inclusive, of this section, projects that either capture and destroy landfill methane, avoid sulfur hexafluoride emissions, sequester carbon through afforestation, provide end-use energy efficiency, or avoid methane emissions from agricultural management operations are eligible for the award of CO_2 offset allowances.

(3) Eligible offset project locations. Eligible offset projects may be located in any participating state or in any state or other U.S. jurisdiction that has entered into a memorandum of understanding with the commissioner and the appropriate regulatory agencies of all participating states to carry out certain obligations relative to CO_2 emissions offset projects in such state or U.S. jurisdiction, including but not limited to the obligation to perform audits of offset project sites, and report violations of this section to the commissioner or the commissioner's designee.

(4) Eligible CO_2 emissions credit retirements. A CO_2 emissions credit retirement shall satisfy all the applicable requirements of this section, to qualify for the award of CO_2 offset allowances. CO_2 emissions credit retirements include the permanent retirement of greenhouse gas allowances or credits issued pursuant to any governmental mandatory carbon constraining program outside the United States that places a specific tonnage limit on greenhouse gas emissions, provided the allowances or credits are acceptable and valid for use in that program at the time the consistency application is filed pursuant to this subsection, or certified greenhouse gas emissions reductions credits issued pursuant to the United Nations Framework Convention on Climate Change (UNFCCC) or protocols adopted through the UNFCCC process. The commissioner or the commissioner's designee may award CO_2 offset allowances for CO_2 emissions credit retirements only after the occurrence of a Stage Two Trigger Event.

(5) General Requirements. In addition to the requirements set forth in subsections (d) to (h), inclusive, of this section, the following general requirements shall apply to each offset project:

(A) CO_2 offset allowances shall not be awarded for an offset project or CO_2 emissions credit retirement that is required pursuant to any local, state or federal law, regulation, or administrative or judicial order. If an offset project receives a consistency determination under this subsection and is later required by local, state or federal law, regulation, or administrative or judicial order, then the offset project shall only remain eligible for the award of CO_2 offset allowances until the end of its current allocation period;

(B) If an offset project includes an electric generation component, the project sponsor shall transfer to the commissioner or the commissioner's designee the legal rights to all attribute credits generated from the operation of the offset project, other than CO_2 offset allowances issued under this subsection, that may be used for compliance with a renewable portfolio standard or other regulatory requirement;

(C) Offset projects may not receive funding or other incentives from any systems benefit fund, or funds or other incentives provided through the auction reserves described in section 22a-174-31(f)(5)(B) to (D), inclusive, of the Regulations of Connecticut State Agencies; and

(D) CO_2 offset allowances shall not be awarded to an offset project or CO_2 emissions credit retirement that is awarded credits or allowances under any other mandatory or voluntary greenhouse gas program, by another participating state, or by any other carbon market.

(6) Maximum allocation periods for CO_2 emissions offset projects. The commissioner or the commissioner's designee may award CO_2 offset allowances under this section as follows:

(A) Maximum allocation periods. Except as provided in subparagraph (B) of this subdivision, the commissioner or the commissioner's designee shall award CO_2 offset allowances under this section for any offset project for an allocation period not to exceed ten years. At the end of the initial 10-year allocation period and upon a demonstration by the project sponsor that the offset project continues to meet all applicable requirements of this section, the commissioner or the commissioner's designee may award CO_2 offset allowances for a second 10-year allocation period. Prior to the expiration of the initial allocation period, the offset project sponsor shall submit a consistency application pursuant to this section and receive a consistency determination from the commissioner or the commissioner's designee; and

(B) Maximum afforestation allocation period. The commissioner or the commissioner's designee may award CO_2 offset allowances under this subsection for any

afforestation offset project for an initial 20-year allocation period. At the end of the initial 20-year allocation period the commissioner or the commissioner's designee may award CO_2 offset allowances for a second 20-year allocation period, provided the offset sponsor has submitted a consistency application for the afforestation offset project prior to the expiration of the initial allocation period, and the commissioner or the commissioner's designee has issued a consistency determination pursuant to this subsection. At the end of the second 20-year allocation period, the commissioner or the commissioner's designee may award CO_2 offset allowances for a third 20-year allocation period, provided the offset sponsor has submitted a consistency application for the afforestation offset project prior to the expiration of the second allocation period, and the commissioner or the commissioner's designee has issued a consistency determination pursuant to this subsection. In no event shall an afforestation offset project be awarded CO_2 offset allowances for more than a total of 60 allocation years.

(7) Timing of offset projects. The commissioner or the commissioner's designee may award CO_2 offset allowances under this section only for offset projects that commenced on or after December 20, 2005.

(8) Offset project audit. Project sponsors shall provide the commissioner or the commissioner's designee access to the physical location of the offset project in order to determine compliance with this section.

(9) Ineligibility due to noncompliance. If at any time the commissioner or the commissioner's designee determines that a project sponsor has not complied with the requirements of this section, the commissioner or the commissioner's designee may revoke and retire any and all offset allowances in the project sponsor's general account. If at any time the commissioner or the commissioner's designee determines that an offset project does not comply with the requirements of this section, the commissioner or the commissioner's designee may revoke any prior approvals issued in relation to an offset project.

(10) Application Process. Any person may act as the sponsor of an eligible CO_2 emissions offset project or CO_2 emissions credit retirement, provided that such person meets the requirements of this subdivision as follows:

(A) Establishment of general account. The sponsor of an offset project or CO_2 emissions credit retirement shall establish a general account under section 22a-174-31(g)(2)(B) of the Regulations of Connecticut State Agencies. All submissions to the commissioner required for the award of CO_2 offset allowances under this subsection shall be from the CO_2 authorized account representative for the general account of the sponsor of the relevant offset project or CO_2 emissions credit retirement;

(B) Consistency application time frames.

(i) For offset projects commenced prior to January 1, 2009, the project sponsor shall submit the consistency application no later than June 30, 2009;

(ii) For offset projects commenced on or after January 1, 2009, the project sponsor shall submit the consistency application no later than the date that is six months after the offset project is commenced; and

(iii) The commissioner or the commissioner's designee shall deny any application that fails to meet the time frames specified in this subparagraph;

(C) Consistency application contents. The sponsor of an offset project shall provide the following information to the commissioner or the commissioner's designee:

(i) The offset project sponsor's name, address, e-mail address, telephone number, facsimile transmission number, and account number;

(ii) The offset project description as required by the relevant provisions of subsection (d) to (h), inclusive, of this section;

(iii) The emissions baseline determination as required by relevant provisions of subsection (d) to (h), inclusive, of this section;

(iv) An explanation of how the projected reduction or avoidance of atmospheric loading of CO_2 or CO_2 equivalent or the sequestration of carbon is to be quantified, monitored and verified as required by the relevant provisions of subsection (d) to (h), inclusive, of this section;

(v) A completed application agreement that reads as follows: ''The undersigned project sponsor recognizes and accepts that the application for, and the receipt of, CO_2 offset allowances under the CO_2 Budget Trading Program is predicated on the project sponsor following all the requirements of section 22a-174-31a of the Regulations of Connecticut State Agencies. The project sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. I understand that eligibility for the award of offset allowances under section 22a-174-31a of the Regulations of Connecticut State Agencies is contingent on meeting the requirements of said section. I authorize the commissioner or the commissioner's designee to audit this offset project for purposes of verifying that the project, including the monitoring and verification plan, has been implemented as described in this application. I understand that this right to audit shall include the right to enter the physical location of the offset project. I submit to the legal jurisdiction of the State of Connecticut.'';

(vi) A statement and certification report signed by the offset project sponsor certifying that all offset projects for which the sponsor has received offset allowances under this section or similar provisions in the rules of other participating states, under the sponsor's ownership or control or under the ownership or control of any entity which controls, is controlled by, or has common control with the sponsor are in compliance with all applicable requirements of the CO_2 Budget Trading Program in all participating states;

(vii) A statement and certification report drafted and signed by an independent verifier, accredited pursuant to this section, indicating that the independent verifier has reviewed the entire application and evaluated the adequacy and validity of the following information in relation to the applicable requirements of this section: the demonstration that the offset project meets the applicable eligibility requirements of this section; baseline emissions in accordance with this section; the monitoring and verification plan submitted in accordance with this section; and such other statements as may be required by commissioner or the commissioner's designee;

(viii) Disclosure of any voluntary or mandatory programs, other than the CO_2 Budget Trading Program, to which greenhouse gas emissions data related to the offset project has been, or will be, reported;

(ix) For offset projects located in a state or United States jurisdiction that is not a participating state, a demonstration that the project sponsor has complied with all requirements of the cooperating regulatory agency in the state where the offset project is located; and

(x) Any other information the commissioner or the commissioner's designee may require in order to evaluate the proposed offset project; and

(D) CO_2 emissions offset credit retirements. For a CO_2 emissions credit retirement, the consistency application shall include sufficient information to demonstrate that the CO_2 emissions credit is eligible pursuant to this section, was lawfully held by the project sponsor, and has been permanently and irrevocably retired.

(11) Place for filing.

(A) For an offset project located in one participating state in whole or in part, the consistency application shall be filed with the appropriate commissioner in such State;

(B) For an offset project located wholly outside all participating states, the consistency application may be filed with the appropriate commissioner in any one participating state. In addition, a copy of the consistency application shall be filed with the cooperating regulatory agency in the state or United States jurisdiction where the offset project is located;

(C) For an offset project located in more than one participating state, the consistency application shall be filed in the participating state where the larger part of the emissions reduction or carbon sequestration due to the offset project activity is projected to occur; and

(D) For CO_2 emissions credit retirements, the consistency application may be filed with the appropriate commissioner in any one participating state.

(12) Commissioner action on consistency applications.

(A) Completeness determination. Not later than 30 days following receipt of the application filed pursuant to subdivision (9)(B) of this subsection, the commissioner or the commissioner's designee shall notify the project sponsor whether the consistency application is complete. A complete consistency application is one that is in an approved form and is determined by the commissioner or the commissioner's designee to be complete for the purpose of commencing review of the application. In no event shall a completeness determination prevent the commissioner or the commissioner's designee from requesting additional information in order to fully evaluate the proposed project in accordance with subparagraph (B) of this subdivision; and

(B) Consistency determination. Not later than 150 days of making the completeness determination under subparagraph (A) of this subdivision, the commissioner or the commissioner's designee shall issue a determination as to whether the offset project has met the requirements of this section and the requirements of the applicable offset project standard of subsection (d), (e), (f), (g) or (h) of this section. For any application found to lack consistency with these requirements, the commissioner or the commissioner's designee shall inform the project sponsor of the offset project's deficiencies.

(d) **Landfill Methane (CH_4) Capture and Destruction**

(1) Eligibility. An offset project that captures and destroys methane from landfills shall meet the requirements of this subsection and all applicable requirements of this section, to qualify for the award of CO_2 offset allowances. In addition, eligible offset projects shall meet the following requirements:

(A) The offset project may only occur at a landfill that is not subject to the New Source Performance Standards for municipal solid waste landfills pursuant to 40 CFR 60, Subpart CC and Subpart WWW; and

(B) Offset project description. The project sponsor shall provide a detailed narrative of the offset project action or actions to be taken, including supporting materials as appropriate. The project narrative shall include the following:

(i) The name or names and addresses of the owner and operator of the offset project;

(ii) Location and specifications of the landfill where the offset project is proposed to occur, including waste in place;

(iii) The name or names and addresses of the owner and operator of the landfill where the offset project is proposed to occur; and

(iv) Specifications of the equipment to be installed and a technical schematic of the offset project.

(2) Emissions baseline determination. The emissions baseline shall represent the potential fugitive landfill emissions, in tons of CO_2e, of the methane (CH_4) collected and metered for thermal destruction as part of the offset project. Baseline CH_4 fugitive emissions shall be calculated as follows:

Emissions (tons CO_2e) = (V x M x (1-OX) x GWP)/2000

Where:

V = Volume of CH_4 collected (ft^3);

M = Mass of CH_4 per cubic foot (0.04246 lbs/ft^3 default value at 1 atmosphere and 20° C);

OX = Oxidation factor (0.10), representing estimated portion of collected CH_4 that would have eventually oxidized to CO_2 if not collected; and

GWP = CO_2e global warming potential of CH_4 (23).

(3) Calculating emissions reductions. Emissions reductions shall be determined based on the difference between potential fugitive CH_4 emissions that would have occurred if metered CH_4 collected from the landfill for thermal destruction as part of the offset project was not collected and destroyed. CO_2e emissions reductions shall be calculated as follows:

Emissions Reductions (tons CO_2e) = (V x M x (1 - OX) x C_{ef} x GWP)/2000

Where:

V = Volume of CH_4 collected (ft^3);

M = Mass of CH_4 per cubic foot (0.04246 lbs/ft^3 default value at 1 atmosphere and 20° C);

OX = Oxidation factor (0.10), representing estimated portion of collected CH_4 that would have eventually oxidized to CO_2 if not collected;

C_{ef} = Combustion efficiency of methane control technology (0.98); and

GWP = CO_2e global warming potential of CH_4 (23).

(4) Monitoring and verification requirements. Offset projects shall employ a landfill gas collection system that provides continuous metering and data computation of landfill gas volumetric flow rate and CH_4 concentration. Annual monitoring and verification reports required pursuant to subsection (j) of this section shall include monthly volumetric flow rate and CH_4 concentration data, including documentation that the CH_4 was actually supplied to the combustion source. The project sponsor shall also:

(A) Submit a monitoring and verification plan as part of the consistency application that includes a quality assurance and quality control program associated with equipment used to determine landfill gas volumetric flow rate and CH_4 composition. The monitoring and verification plan shall include provisions for ensuring that measuring and monitoring equipment is maintained, operated and calibrated based on manufacturer recommendations, as well as provisions for the retention of maintenance records

for audit purposes. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to subsection (i) of this section; and

(B) Annually verify landfill gas CH_4 composition through landfill gas sampling and third party laboratory analysis using applicable U.S. Environmental Protection Agency laboratory test methods.

(e) **Reduction in emissions of sulfur hexafluoride (SF_6).**

(1) Eligibility. Offset projects that prevent emissions of sulfur hexafluoride to the atmosphere from equipment in the electricity transmission and distribution sector, through capture and storage, recycling, or destruction, shall meet the requirements of this subsection and all applicable requirements of this section, to qualify for the award of CO_2 offset allowances.

(A) Eligible offset projects shall consist of the incremental actions to be taken, beyond current actions, to achieve a reduction in emissions of SF_6 beyond the transmission and distribution entity's emissions in the baseline reporting year. The identified actions to be taken shall be consistent with the guidance provided in International Electrotechnical Commission (IEC) 1634, and ''High-voltage switchgear and control gear – Use and handling of sulfur hexafluoride (SF_6) in high-voltage switchgear and control gear,'' (CEI/IEC 1634, 1995-04);

(B) Except as provided in subparagraph (C) of this subdivision, eligible offset projects shall take place where the SF_6 entity-wide emissions rate for the baseline year is less than the applicable emissions rate in Table 31a-1B. The entity-wide SF_6 emissions rate shall be calculated as follows:

SF_6 Emissions Rate (%) = (Total SF_6 Emissions for Reporting Year)/ (Total SF_6 Nameplate Capacity at End of Reporting Year)

Where:

SF_6 Nameplate Capacity refers to all SF_6-containing operating equipment owned or operated by the entity, at full and proper SF_6 charge of the equipment rather than the actual charge of the equipment, which may reflect leakage.

Table 31a-1A and B
SF_6 Emissions Rate Performance Standards

Table 31a-1A. Emission Regions

Region A	Region B	Region C	Region D	Region E
Connecticut	Alabama	Colorado	Arkansas	Alaska
Delaware	District of Columbia	Illinois	Iowa	Arizona
Maine	Florida	Indiana	Kansas	California
Massachusetts	Georgia	Michigan	Louisiana	Hawaii
New Jersey	Kentucky	Minnesota	Missouri	Idaho
New York	Maryland	Montana	Nebraska	Nevada
New Hampshire	Mississippi	North Dakota	New Mexico	Oregon
Pennsylvania	North Carolina	Ohio	Oklahoma	Washington
Rhode Island	South Carolina	South Dakota	Texas	
Vermont	Tennessee	Utah		
	Virginia	Wisconsin		
	West Virginia	Wyoming		

Table 31a-1B. Emissions Rate Performance Standards

Region	Emission Rate[a]
Region A	9.68%
Region B	5.22%
Region C	9.68%
Region D	5.77%
Region E	3.65%
U.S. (National)	9.68%

[a] Based on weighted average 2004 emissions rates for U.S. EPA SF_6 Partnership utilities in each region. If the weighted average emissions rate in a region is higher than the national weighted average, the default performance standard is the national weighted average emissions rate;

(C) An SF_6 offset project located at a transmission or distribution entity serving a predominantly urban service territory shall be eligible even if the entity does not meet the emissions rate requirement of subparagraph (B) Table 31a- 1B of this subdivision, provided the project sponsor demonstrates and the commissioner or the commissioner's designee determines that two or more of the following factors functionally impede management of SF_6 and prevent such entities from meeting the entity-wide emissions rate requirement:

(i) The entity is comprised of older than average installed transmission and distribution equipment in relation to the national average age of equipment;

(ii) A majority of the entity's electricity load is served by equipment that is located underground, and poor accessibility of such underground equipment precludes management of SF_6 emissions through regular ongoing maintenance;

(iii) The inability of the entity to take a substantial portion of equipment out of service, as such activity would jeopardize system reliability as set forth in applicable regulatory criteria documents; and

(iv) Required equipment purpose or design for a substantial portion of entity transmission and distribution equipment results in inherently leak-prone equipment.

(2) Offset project description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including supporting materials as appropriate. The offset project narrative shall include the following:

(A) A description of the transmission or distribution entity specifying the service territory served by the entity; and

(B) The owner and operator of the transmission or distribution entity.

(3) Emissions baseline determination. Baseline SF_6 emissions shall be determined based on annual entity-wide reporting of SF_6 emissions for the calendar year immediately preceding the calendar year in which the consistency application is filed and such calendar year shall be designated as the baseline year. If the consistency application is filed prior to 2009, the baseline year may be 2005, but no earlier. The reporting entity shall systematically track and account for all entity-wide uses of SF_6 in order to determine entity-wide emissions of SF_6. The scope of such tracking and accounting shall include all electric transmission and distribution assets and all SF_6-containing and SF_6-handling equipment owned or operated by the reporting entity.

(A) Emissions shall be determined based on the following mass balance method:
SF_6 Emissions (lbs.) = (SF_6 Change in Inventory) + (SF_6 Purchases and Acquisitions) – (SF_6 Sales and Disbursements) – (Change in Total SF_6 Nameplate Capacity of Equipment)

Where:

Change in Inventory means the difference between the quantity of SF_6 gas in storage at the beginning of the reporting year and the quantity in storage at the end of the reporting year. The change in inventory will be negative if the quantity of SF_6 gas in storage increases over the course of the year;

Quantity in Storage means all SF_6 gas contained in cylinders, including 115-pound storage cylinders, gas carts, and other storage containers. This term does not refer to SF_6 gas held in SF_6-containing operating equipment;

Purchases and Acquisitions of SF_6 means the sum of all the SF_6 gas acquired from other parties during the reporting year, as contained in storage containers or SF_6-containing operating equipment;

Sales and Disbursements of SF_6 means the sum of all the SF_6 gas sold or otherwise disbursed to other parties during the reporting year, as contained in storage containers and SF_6-containing operating equipment; and

Change in Total SF_6 Nameplate Capacity of Equipment means the net change in the total volume of SF_6-containing operating equipment during the reporting year. The net change in nameplate capacity is equal to new equipment nameplate capacity, minus retired nameplate capacity. This quantity will be negative if the retired equipment has a total nameplate capacity larger than the total nameplate capacity of the new equipment. ''Total nameplate capacity'' refers to the full and proper SF_6 charge of the equipment rather than to the actual charge, which may reflect leakage;

(B) Emissions shall be calculated as follows:
Emissions (tons CO_2e) = $[(V_{iby} - V_{iey}) + (PA_{psd} + PA_e + PA_{rre}) - (SD_{op} + SD_{rs} + SD_{df} + SD_{sor}) - (CNP_{ne} - CNP_{rse})]$ x GWP/2000

Where (all SF_6 values in lbs):

V_{iby} = SF_6 inventory in cylinders, gas carts, and other storage containers (not SF_6–containing operating equipment) at the beginning of the reporting year;

V_{iey} = SF_6 inventory in cylinders, gas carts, and other storage containers (not SF_6–containing operating equipment) at the end of the reporting year;

PA_{psd} = SF_6 purchased from suppliers or distributors in cylinders;

PA_e = SF_6 provided by equipment manufacturers with or inside equipment;

PA_{rre} = SF_6 returned to the reporting entity after off-site recycling;

SD_{op} = Sales of SF_6 to other parties, including gas left in equipment that is sold;

SD_{rs} = Returns of SF_6 to supplier, producer or distributor;

SD_{df} = SF_6 sent to destruction facilities;

SD_{sor} = SF_6 sent off-site for recycling;

CNP_{ne} = Total SF_6 nameplate capacity of new equipment at proper full charge;

CNP_{rse} = Total SF_6 nameplate capacity of retired or sold equipment at proper full charge; and

GWP = CO_2e global warming potential of SF_6 (22,200); and

(C) As part of the project consistency application required pursuant to subsection (c) of this section and in annual monitoring and verification reports required pursuant to subsection (j) of this section, the project sponsor shall provide the documentation required at subdivision (5)(A) to (C), inclusive, of this subsection to support emissions calculations.

(4) Calculating emissions reductions. Emissions reductions shall represent the annual entity-wide avoided fugitive emissions of SF_6 for the reporting entity. Emissions reductions shall be determined as follows using the quantification method outlined in subdivision (3)(B) of this subsection to determine emissions in both the baseline year and reporting years:

Emissions Reduction (short tons CO_2e) = (Total Pounds of SF_6 Emissions in Baseline Reporting Year) – (Total Pounds of SF_6 Emissions in Reporting Year) x GWP/2000

Where:

GWP = CO_2e global warming potential of SF_6 (22,200).

(5) Annual monitoring and verification requirements. The annual monitoring and verification report shall include supporting material detailing the calculations and data used to determine SF_6 emissions reductions and the project sponsor shall also provide the following documentation:

(A) An identification of all facilities managed by the entity from which all SF_6 gas is procured and disbursed and maintain an entity-wide log of all SF_6 gas procurements and disbursals. The entity-wide log shall include the weight of each cylinder transported before shipment from the facilities and the weight of each cylinder after return to the facilities. A specific cylinder log shall also be maintained for each cylinder that is used to fill equipment with SF_6 or reclaim SF_6 from equipment. The cylinder log shall be retained with the cylinder and indicate the location and specific identifying information of the equipment being filled, or from which SF_6 is reclaimed, and the weight of the cylinder before and after this activity. The cylinder log shall be returned with the cylinder to the facility when the activity is complete or the cylinder is empty;

(B) A current entity-wide inventory of all SF_6-containing operating equipment and all other SF_6-related items, including cylinders, gas carts, and other storage containers used by the entity. The inventory shall be certified by an independent verifier accredited pursuant to subsection (i) of this section; and

(C) A monitoring and verification plan as part of the consistency application, which shall include an SF_6 inventory management and auditing protocol and a process for quality assurance and quality control of inventory data. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to subsection (i) of this section.

(f) **Sequestration of Carbon Due To Afforestation.**

(1) Eligibility. Offset projects that result in the conversion of land from a non-forested to forested state shall meet the requirements in this subsection and all

applicable requirements of this section, to qualify for the award of CO_2 offset allowances.

(A) Eligible offset projects have been in a non-forested state for at least the ten (10) years preceding the commencement of the offset project; and

(B) Eligible offset projects shall be managed in accordance with widely accepted environmentally sustainable forestry practices and designed to promote the restoration of native forests by using mainly native species and avoiding the introduction of invasive non-native species. If commercial timber harvest activities are to occur, certification shall be obtained, prior to any harvest activities at the site, through the Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), American Tree Farm System (ATFS), or such other similar organizations as may be approved by the commissioner or the commissioner's designee.

(2) Offset project description. The project sponsor shall provide a detailed narrative of the offset project actions to be taken, including supporting materials as appropriate. The offset project narrative shall include the following:

(A) The name or names and addresses of the owner of the land within the offset project boundary;

(B) A detailed map of the land within the offset project boundary and areas adjacent to the offset project boundary;

(C) A copy of the permanent conservation easement required pursuant to subdivision (6) of this subsection;

(D) A written legal opinion from an attorney licensed to practice in the state where the offset project is located, or from the cooperating regulatory agency, confirming the enforceability of the permanent conservation easement for those offset projects located in a state or United States jurisdiction that is not a participating state; and

(E) Plant species to be planted or established via natural regeneration, and a forest management plan consistent with the requirements of subdivision (3) of this subsection.

(3) Carbon sequestration baseline determination. The existing sequestered carbon within the project boundary shall be calculated prior to commencement of the offset project. The carbon sequestration baseline shall be determined based on a sum of measurements, made no more than 12 months prior to offset project commencement, of the carbon content of the following carbon pools:

(A) Carbon content shall be calculated for the following required carbon pools:

(i) Live above-ground tree biomass;

(ii) Live below-ground tree biomass;

(iii) Soil carbon; and

(iv) Dead organic matter, and coarse woody debris, unless the baseline measurement for this carbon pool is at or near zero, in which case measurement of this carbon pool during the allocation period is optional;

(B) Carbon content may be calculated for the following optional carbon pools:

(i) Live above-ground non-tree biomass; and

(ii) Dead organic matter, and forest floor;

(C) Carbon content shall be calculated individually for each carbon pool within the offset project boundary;

(D) To increase the accuracy of measurement and verification, the area within the offset project boundary shall be divided into sub-populations that form relatively homogenous units. When defining sub-populations, the project sponsor shall consider vegetation and tree species, including existing vegetation and trees and those to be

utilized as part of the offset project activity, and site factors such as soil type, elevation, slope and other factors as warranted;

(E) Calculation of sequestered carbon for each carbon pool in each reporting stratum shall be based on the following:

CO_2 tons = [(A x C/ha)(44/12)] / 0.9072

Where:

A = Area in hectares within each reporting stratum;

C = Carbon content (metric tons of carbon for each carbon pool);

C/ha = Mean carbon content per hectare for each carbon pool;

(F) Total carbon contained within the offset project boundary represented in tons of carbon shall be calculated as follows:

$TC_{pb} = TC_{latb} + TC_{lbtb} + TC_s$ [$+ TC_{lantb} + TC_{doff} + TC_{docwd}$]

Where:

TC_{pb} = Total carbon content within the offset project boundary (TC_{pb}) (sum of carbon content of all carbon pools in all reporting sub-populations);

TC_{latb} = Sum of carbon content of live above-ground tree biomass in all reporting sub-populations;

TC_{lbtb} = Sum of carbon content of live below-ground tree biomass in all reporting sub-populations;

TC_s = Sum of carbon content of soil carbon in all reporting sub-populations;

TC_{lantb} [option] = Sum of carbon content of live above-ground non-tree biomass in each reporting sub-populations;

TC_{doff} [option] = Sum of carbon content of dead organic matter, forest floor in all reporting sub-populations; and

TC_{docwd}[mandatory/option] = Sum of carbon content of dead organic matter, coarse woody debris in all reporting sub-populations pursuant to subdivision (3)(A)(iv) of this subsection;

(G) Each individual carbon pool to be measured shall be directly measured using a measurement protocol and sample size that achieves a demonstrated quantified accuracy such that there is at least 95% confidence that the resulting reported value is within 10% of the true mean. Measurement and sampling practices shall meet the following requirements:

(i) An adequate sample size that meets the requirements of subparagraph (ii) of this subparagraph shall be determined for each stratum;

(ii) The minimum number of required sampling plots for each reporting stratum shall be determined based on the following:

$n = (s \times 1.960)/(\text{mean} \times re)^2$

Where:

n = required number of sample plots for each reporting sub-populations;

s = standard deviation;

mean = mean reported carbon content for the sample population; and

re = level of sampling error (0.08) to assure a total maximum error of 10% for the 95% confidence interval, that assumes total error due to measurement error of 0.02; and

(H) Direct measurement procedures shall be consistent with current forestry good practice and the guidance contained in U.S. Department of Energy, *Technical Guidelines for Voluntary Reporting of Greenhouse Gases (1605(b)) Program; Chapter 1, Emissions Inventories; Part I Appendix: Forestry; Section 3: Measurement Protocols for Forest Carbon Sequestration* (March 2006).

(4) Calculating carbon sequestered. Carbon sequestration shall be determined using a base year approach, where the amount of carbon sequestered is measured as a net increase in carbon relative to the base year measurement. Carbon sequestration, represented in tons of carbon, shall be the amount of net additional carbon sequestered during each calculation period, based upon aggregate carbon uptake and carbon emissions for the sum of carbon pools, relative to the baseline carbon content or the carbon content as of the previous calculation period, if above the baseline carbon content, as applicable. CO_2 offset allowances shall be issued based on the amount of net additional carbon sequestered within the offset project boundary during each reporting period, and represented in tons of CO_2 equivalent. Sequestered carbon shall be calculated using a stock-change approach as follows:

$$NCS_t = I_t - I_{t-1}$$

Where:

NCS_t = Net carbon sequestered in reporting period t;

I_t = Inventory of carbon stock for all carbon pools in all reporting sub-populations within the offset project boundary in reporting period t; and

I_{t-1} = Inventory of carbon stock for all carbon pools in all reporting sub-populations within the offset project boundary in the reporting period immediately preceding reporting period t;

(A) Except as provided in subdivision (3)(A)(iv) of this subsection, each of the carbon pools that were measured as part of the baseline determination shall be remeasured using the same methodology, and to the same or better quantified accuracy consistent with the requirements of subdivisions (3)(G) and (H) of this subsection;

(B) The net change in each pool's carbon stock in each reporting stratum is calculated by subtracting the baseline carbon stock (or stock at the previous monitoring) from the carbon stock at the time of the current monitoring. Determination of carbon stock shall be in accordance with the formulas and procedures in subdivision (3) of this subsection;

(C) Net carbon stock change for the offset project is the sum of the net changes in the carbon stock of all applicable pools in all reporting sub-populations within the offset project boundary, less ten percent (10%) to account for potential losses of sequestered carbon. This 10% discount shall not be required, provided the project

sponsor retains long-term insurance, approved by the commissioner or their designee, that guarantees replacement of any lost sequestered carbon for which CO_2 allowances were issued pursuant to subsection (j) of this section;

(5) Monitoring and verification requirements. Total carbon stock shall be calculated not less than every five years.

(A) A project sponsor shall submit monitoring and verification reports. Such reports shall include data from direct measurement of carbon content for all plots used to determine baseline and reporting period carbon content;

(B) The consistency application shall include a monitoring and verification plan certified by the commissioner or the commissioner's designee or an independent verifier accredited pursuant to subsection (i) of this section. The monitoring and verification plan shall include the following:

(i) Direct carbon measurement procedures consistent with the requirements at subdivision (3)(H) of this subsection;

(ii) The designation of sub-populations pursuant to subdivision (3)(D) of this subsection. The determination of the minimum number of sampling plots pursuant to subdivision (3)(G) of this subsection; and

(iii) If commercial timber harvest activities have occurred or will occur, an assessment of management practices to ensure that the offset project has been managed in accordance with environmentally sustainable forestry practices consistent with the Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), American Tree Farm System (ATFS), or such other similar organizations as may be approved by the commissioner or their designee; and

(C) The applicant shall allow access to the project site and the reserve set-aside site to the accredited independent verifier, or as requested by the commissioner or the commissioner's designee.

(6) Carbon sequestration permanence. The offset project shall meet the following requirements to address permanence of sequestered carbon:

(A) The project sponsor shall place the land within the offset project boundary under a legally binding permanent conservation easement, approved by the commissioner or the commissioner's designee, which requires the land to be maintained in a forested state in perpetuity;

(B) The conservation easement shall include a requirement that the carbon density within the offset project boundary be maintained at long-term levels at or above that achieved as of the end of the CO_2 offset crediting period pursuant to subsection (c)(5) of this section; and

(C) The conservation easement shall require that the land be managed in accordance with environmentally sustainable forestry practices.

(g) **Reduced or Avoided CO_2 Emissions Due to End-Use Energy Efficiency**

(1) Eligibility. An offset project that reduces CO_2 emissions by reducing on-site combustion of natural gas, oil, or propane for end-use in an existing or new commercial or residential building by improving the energy efficiency of fuel usage and the energy-efficient delivery of energy services shall meet the requirements ofthis subsection and all other applicable requirements of this section, to qualify for the award of CO_2 offset allowances. Eligible new buildings are limited to new buildings that are designed to replace an existing building on the offset project site, or new buildings designed to be zero net energy buildings. Eligible offset projects may include the following energy conservation measures (ECMs):

(A) Improvements in the energy efficiency of combustion equipment that provide space heating and hot water, including a reduction in fossil fuel consumption through the use of solar and geothermal energy;

(B) Improvements in the efficiency of heating distribution systems, including proper sizing and commissioning of heating systems;

(C) Installation or improvement of energy management systems;

(D) Improvement in the efficiency of hot water distribution systems and reduction in demand for hot water;

(E) Measures that improve the thermal performance of the building envelope or reduce building envelope air leakage;

(F) Measures that improve the passive solar performance of buildings and utilization of active heating systems using renewable energy; and

(G) Switching to a less carbon-intensive fuel for use in combustion systems, including the use of liquid or gaseous renewable fuels, provided that conversions to electricity are not eligible.

(2) Offset project description. The project sponsor shall provide a detailed narrative of the offset project actions to be taken, including supporting materials as appropriate. The offset project narrative shall include the following:

(A) Location and specifications of the building or buildings where the offset project actions are proposed to occur;

(B) The name or names and address of the owner and operator of the building or buildings;

(C) The parties implementing the offset project, including the lead contractor or contractors, subcontractors, and consulting firms;

(D) Specifications of equipment and materials to be installed as part of the offset project; and

(E) Building plans and offset project technical schematics, as applicable.

(3) Performance standards. For offset projects initiated on or after January 1, 2009, the project sponsor shall demonstrate, to the satisfaction of the commissioner or the commissioner's designee, that energy conservation measures implemented as part of eligible offset projects listed in subdivision (1) of this subsection have a market penetration rate of less than 5%. Offset projects initiated on or after January 1, 2009 shall also meet the applicable requirements set forth in subparagraphs (A)(iii) and (C) of this subdivision. For offset projects initiated prior to 2009, energy conservation measures implemented as part of eligible offset projects listed in subdivision (1) of this subsection shall meet the following performance or prescriptive criteria, as applicable:

(A) Combustion equipment. Combustion equipment shall meet the following energy efficiency performance and other requirements, as applicable:

(i) Commercial boilers. Commercial boilers shall meet the following energy efficiency criteria set forth in Table 31a-2:

Table 31a-2

Minimum Commercial Boiler Energy Efficiency

Technology	Size (Btu/hr)	Rating Method	Min. Efficiency
Gas-fired[b]	125,000-3000,000	AFUE	≥ 88.0%
	300,00-12,500,00	Thermal Efficiency[a]	≥ 90.0%
Oil-fired	> 300,000	Thermal Efficiency	≥ 84.0%

[a] For purposes of Table 31a-2, ''Thermal Efficiency'' means the useful energy output (Btu) divided by energy input (Btu) and presented as a percentage measured under steady state conditions, at full rated useful thermal output, 140°F supply from and 120°F return water temperature to the boiler.

[b] Gas-fired boilers shall be installed with controls that allow the boiler to operate in condensing mode and installed with vents designed for positive vent static pressure and vent gas temperature that leads to condensate production in the vent.

(ii) Residential combustion equipment. Residential combustion equipment, furnaces, boilers and water heaters, shall meet or exceed the following energy efficiency criteria set forth in Table 31a-3:

Table 31a-3
Minimum Residential Combustion Equipment[a] Energy Efficiency

Technology	Rating Method	Min. Efficiency
Gas-fired furnace	AFUE	≥ 94%
Oil-fired furnace	AFUE	≥ 92%
Gas/oil-fired boiler	AFUE	≥ 90%
Gas/oil-fired water heater	Energy Factor	≥ 0.62

[a] For purposes of Table 31a-3, ''furnace'' means equipment with a heat input rate of less than 225,000 Btu/hr; ''boiler'' means equipment with a heat input rate of less than 300,000 Btu/hr; and ''water heater'' means equipment subject to 10 CFR 430.

(iii) Installation best practice for commercial HVAC systems. Combustion equipment and related air handling equipment (HVAC systems) shall be sized and installed in accordance with ANSI/ASHRAE/IESNA Standard 90.1-2004: Energy Standard for Buildings Except Low-Rise Residential Buildings and ANSI/ASHRAE Standard 62.1-2004: Ventilation for Acceptable Indoor Air Quality; and

(iv) Installation best practice for residential HVAC systems. Residential HVAC systems shall meet the applicable sizing and installation specifications of ''Specification of Energy-Efficient Installation and Maintenance Practices for Residential HVAC Systems,'' Consortium for Energy Efficiency, 2000;

(B) Non-combustion energy conservation measures. Energy conservation measures implemented as part of an offset project or actions pursuant to subdivision (1)(B) to (G), inclusive, of this subsection shall meet the applicable requirements, as specified, in *Energy Benchmark for High Performance Buildings, Version 1.1*, New Buildings Institute, 2005 (referred to as EBHPB in this section), or state building energy codes, whichever are more stringent as demonstrated by the offset project sponsor. Energy conservation measures without specified performance criteria in the referenced EBHPB shall meet the requirements of Federal Energy Management Program (FEMP) Product Energy Efficiency Recommendations, issued pursuant to Executive Orders 13123 and 13221, or Energy Star criteria issued jointly by the U.S. Environmental Protection Agency and U.S. Department of Energy, whichever result in better energy performance as demonstrated by the offset project sponsor; and

(C) Whole-building energy performance. New buildings or whole building retrofits that incorporate offsets projects or actions shall also meet the following requirements:

(i) Commercial buildings. Commercial buildings shall exceed the energy performance requirements of ANSI/ASHRAE/IESNA Standard 90.1-2004: Energy Standard for Buildings Except Low-Rise Residential Buildings by 30%, with the exception of multi-family residential buildings classified as commercial by ANSI/

ASHRAE/IESNA Standard 90.1-2004, which shall exceed these energy performance requirements by 20%; and

(ii) Residential buildings. Residential buildings shall exceed the energy performance requirements of the 2004 International Energy Conservation Code Supplement by 30%.

(4) Emissions baseline determination. The emissions baseline shall be determined based on energy usage (MMBtu) by fuel type for each energy conservation measure, derived using historic fuel use data from the most recent calendar year for which data is available, multiplied by an emission factor and oxidation factor for each respective fuel set forth in Table 31a-4:

Table 31a-4

Fuel	Emission Factor (lbs. CO_2/MMBtu)	Oxidation Factor
Natural Gas	116.98	0.995
Propane	139.04	0.995
Distillate Fuel Oil	161.27	0.99
Kerosene	159.41	0.99

(A) Isolation of applicable energy conservation measure baseline. The project sponsor shall isolate the baseline energy usage of the application to be targeted by the energy conservation measure, in a manner consistent with the requirements set forth in subdivision (6) of this subsection;

(B) Annual baseline energy usage shall be determined as follows:

$$\text{Energy Usage (MMBtu)} = BEU_{AECM} \times A$$

Where:

BEU_{AECM} = Annual pre-installation baseline energy use by fuel type (MMBtu) attributable to the application to be targeted by the energy conservation measure or measures. If applicable building codes or equipment standards require that equipment or materials installed as part of the offset project meet certain minimum energy performance requirements, baseline energy usage for the application shall assume that equipment or materials are installed that meet such minimum requirements. For offset projects that replace existing combustion equipment, the assumed minimum energy performance required by applicable building codes or equipment standards shall be that which applies to new equipment that uses the same fuel type as the equipment being replaced. Baseline energy usage shall be determined in accordance with the applicable requirements set forth in subdivision (6) of this subsection; and

A = Adjustments to account for differing conditions during the two time periods, pre-installation and post-installation, such as weather and building occupancy. Adjustments shall be determined in accordance with the applicable requirements in subdivision (6) of this subsection; and

(C) Annual baseline emissions shall be determined as follows:

$$\text{Emissions (lbs. } CO_2) = \sum_{i=1}^{n} BEU_i \times EF_i \times OF_i$$

Where:

BEU_i = Annual baseline energy usage for fuel type i (MMBtu) demonstrated pursuant to the requirements at subdivision (6)(A) to (D), inclusive, of this subsection;

EF_i = Emissions factor (lbs. CO_2/MMBtu) for fuel type i listed at subdivision (4), Table 31a-4 of this subsection; and

OF_i = Oxidation factor for fuel type i listed at subdivision (4), Table 31a-4 of this subsection.

(5) Calculating emissions reductions. Emissions reductions shall be determined based upon annual energy savings by fuel type (MMBtu) for each energy conservation measure, multiplied by the emission factor and oxidation factor for the respective fuel type in subdivision (4), Table 31a-4 of this subsection.

(A) Annual energy savings shall be determined as follows:

$$\text{Energy Savings (MMBtu)} = (BEU_{AECM} \times A) - (PIEU_{ECM} \times A)$$

Where:

BEU_{AECM} = Annual pre-installation baseline energy use by fuel type (MMBtu) calculated pursuant to subdivision (6)(A) to (D), inclusive, of this subsection;

$PIEU_{ECM}$ = Annual post-installation energy use by fuel type (MMBtu) attributable to the energy conservation measure. Post-installation energy usage shall be determined in accordance with the applicable requirements in subdivision (6) of this subsection; and

A = Adjustments to account for any differing conditions during the two time periods, pre-installation and post-installation, including but not limited to weather, building occupancy, and changes in building use or function. Adjustments shall be determined in accordance with the applicable requirements at subdivision (6) of this subdivision; and

(B) Annual emissions reductions shall be determined as follows:

$$\text{Emissions Reduction (lbs. } CO_2) = \sum_{i=1}^{n} ES_i \times EF_i \times OF_i$$

Where:

ES_i = Energy savings for fuel type i (MMBtu) demonstrated pursuant to the requirements at subdivision (6) of this subsection;

EF_i = Emissions factor (lbs. CO_2/MMBtu) for fuel type i listed at subdivision (4), Table 31a-4 of this subsection; and

OF_i = Oxidation factor for fuel type i listed in subdivision (4), Table 31a-4 of this subsection.

(6) Monitoring and verification requirements. As part of the consistency application, the project sponsor shall provide a monitoring and verification plan certified by an independent verifier accredited pursuant to subsection (i) of this section.

Annual monitoring and verification reports shall be certified by an independent verifier accredited pursuant to subsection (i) of this section. Independent verifiers shall conduct a site audit when reviewing the first monitoring and verification report submitted by the project sponsor, except for offset projects that save less than 1,500 MMBtu per year. For offset projects that save less than 1,500 MMBtu per year, the project sponsor shall provide the independent verifier with equipment specifications and copies of equipment invoices and other relevant offset project-related invoices. All offset project documentation, including the consistency application and monitoring and verification reports, shall be signed by a Professional Engineer, identified by license number. Monitoring and verification shall also meet the following requirements:

(A) General energy measurement and verification requirements. Monitoring and verification of energy usage shall be demonstrated through a documented process consistent with the following protocols and procedures, as applicable:

(i) For existing commercial buildings, the determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume I: Concepts and Options for Determining Energy and Water Savings (IPMVP), ''Option B. Retrofit Isolation'' and ''Option D. Calibrated Simulation.'' If a building project involves only energy conservation measures implemented as part of a CO_2 emissions offset project, a process consistent with IPMVP ''Option C. Whole Facility'' may be used, as applicable. Any application of the IPMVP general guidance shall be consistent with the applicable detailed specifications in ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings;

(ii) For new commercial buildings, the determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume III: Concepts and Options for Determining Energy Savings in New Construction (IPMVP), ''Option D. Calibrated Simulation.'' Any application of the IPMVP general guidance shall be consistent with the applicable detailed specifications in ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings; and

(iii) For existing and new residential buildings, the determination of baseline energy usage shall be consistent with the requirements of the RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of the 2006 Mortgage Industry National Home Energy Rating System Standards);

(B) Isolation of applicable energy conservation measure. In calculating both baseline energy usage and energy savings, the applicant shall isolate the impact of each eligible energy conservation measure (ECM), either through direct metering or energy simulation modeling. For offset projects with multiple ECMs, and where individual ECMs can affect the performance of others, the sum of energy savings due to individual ECMs shall be adjusted to account for the interaction of ECMs. For commercial buildings, this process shall be consistent with the requirements of ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1-2004: Energy Standard for Buildings Except Low-Rise Residential Buildings. For residential buildings, this process shall be consistent with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006, Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards. Reductions in energy usage due to the energy conservation measure shall be based upon actual energy usage data. Energy simulation modeling shall only be used to determine the relative percentage contribution to total fuel usage, for each respective fuel type, of the application targeted by the energy conservation measure;

(C) Calculation of energy savings. Annual energy savings are to be determined based on the following:

Energy Savings (MMBtu) = $(BEU_{AECM} \times A) - (PIEU_{ECM} \times A)$

Where:

BEU_{AECM} = Annual pre-installation baseline energy use by fuel type (MMBtu) attributable to the application to be targeted by the energy conservation measure or measures, based upon annual fuel usage data for the most recent calendar year for which data is available. For new buildings, baseline energy use for a reference building equivalent in basic configuration, orientation, and location to the building in which the eligible energy conservation measure or measures is implemented shall be determined according to ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings and ANSI/ASHRAE/IESNA Standard 90.1-2004, Section 11 and Appendix G. Where energy simulation modeling is used to evaluate an existing building, modeling shall be conducted in accordance with ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1-2004, Section 11 and Appendix G. For existing and new residential buildings, energy simulation modeling shall be conducted in accordance with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006, Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards;

$PIEU_{ECM}$ = Annual post-installation energy use by fuel type (MMBtu) attributable to the energy conservation measure, to be verified based on annual energy use after installation of the energy conservation measure or measures, consistent with the requirements of ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings. Where energy simulation modeling is used to evaluate a new or existing building, modeling shall be conducted in accordance with ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1-2004, Section 11 and Appendix G. For existing and new residential buildings, energy simulation modeling shall be consistent with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006, Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards; and

A = Adjustments to account for any differing conditions during the two time periods (pre-installation and post-installation), such as weather (weather normalized energy usage based on heating and cooling degree days), building occupancy, and changes in building use or function. For commercial buildings, adjustments shall be consistent with the specifications of ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1-2004, Section 11 and Appendix G. For residential buildings, adjustments shall be consistent with the specifications of RESNET National Home Energy Rating Technical Guidelines, 2006, Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards; and

(D) Provision for sampling of multiple like offset projects in residential buildings. Offset projects that implement similar measures in multiple residential buildings may employ representative sampling of buildings to determine aggregate baseline energy usage and energy savings. The commissioner or their designee shall approve sampling protocols. All sampling plans shall be certified by an independent verifier, accredited pursuant to subsection (i) of this section.

(h) **Avoided Methane (CH_4) Emissions from Agricultural Manure Management Operations**

(1) Eligibility. Offset projects that capture and destroy methane from animal manure and organic food waste using anaerobic digesters shall meet the requirements of this subsection and all other applicable requirements of this section, to qualify for the award of CO_2 offset allowances. In addition, eligible offset projects shall meet the following requirements:

(A) CO_2 offset allowances may be awarded for the destruction of that portion of methane generated by the anaerobic digester that would have been generated in the absence of the offset project through the uncontrolled anaerobic storage of manure or organic food wastes;

(B) Eligible offset projects shall employ only manure-based anaerobic digester systems using livestock manure as the majority of digester feedstock, defined as 50% or more of the mass input into the digester on an annual basis. Organic food waste used by an anaerobic digester shall only be that which would have been stored in anaerobic conditions in the absence of the offset project;

(C) The provisions of subsection (c)(5)(B) and (C) of this section shall not apply to agricultural manure methane offset projects provided either:

(i) The offset project is located in a state that has a market penetration rate for anaerobic digester projects of 5% or less. The market penetration determination shall utilize the most recent market data available at the time of submission of the consistency application and shall be determined as follows:

$$MP\ (\%) = MG_{AD}/MG_{STATE}$$

Where:

MG_{AD} = Average annual manure generation for the number of dairy cows and swine serving all anaerobic digester projects in the applicable U.S. state at the time of submission of a consistency application pursuant to subsection (c)(10) of this section; and

MG_{STATE} = Average annual manure production of all dairy cows and swine in that U.S. state at the time of submission of a consistency application pursuant to subsection (c)(10) of this section;

or

(ii) The offset project is located at a farm with 4,000 or less head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (lbs./cow) of 1,400 lbs., or, if the project is a regional-type digester, total annual manure input to the digester is designed to be less than the average annual manure produced by a farm with 4,000 or less head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (lbs./cow) of 1,400 lbs.

(2) Offset project description. The project sponsor shall provide a detailed narrative of the offset project, including supporting materials as appropriate. The offset project narrative shall include the following:

(A) The name or names and addresses of the owner and operator of the offset project;

(B) Location and specifications of the facility where the offset project is proposed to occur;

(C) The name or names and addresses of the owner and operator of the facility where the offset project is proposed to occur;

(D) Specifications of the equipment to be installed and a technical schematic of the offset project; and

(E) Location and specifications of the facilities from which anaerobic digester influent will be received, if different from the facility where the offset project is proposed to occur.

(3) Emissions baseline determination. The emissions baseline shall represent the potential emissions of the CH_4 that would have been produced in a baseline scenario under uncontrolled anaerobic storage conditions and released directly to the atmosphere in the absence of the offset project.

(A) Baseline CH_4 emissions shall be calculated as follows:

$$CO_2e \text{ (tons)} = (V_m \times M)/2000 \times GWP$$

Where:

CO_2e = Potential CO_2e emissions due to calculated CH_4 production under site-specific anaerobic storage and weather conditions;

V_m = Volume of CH_4 produced each month from degradation of volatile solids in a baseline uncontrolled anaerobic storage scenario under site-specific storage and weather conditions for the facility at which the manure is generated (ft^3);

M = Mass of CH_4 per cubic foot (0.04246 lb/ft^3 default value at one atmosphere and 20°C); and

GWP = Global warming potential of CH_4 (23);

(B) The estimated amount of volatile solids degraded each month under the uncontrolled anaerobic storage baseline scenario (kg) shall be calculated as follows:

$$VS_{deg} = VS_{avail} \times f$$

Where:

VS = volatile solids as determined from the equation:

$$VS = M_m \times TS_{\%} \times VS_{\%}$$

Where:

M_m = mass of manure or organic good waste produced per month (kg);

$TS_{\%}$ = Concentration (percent) of total solids in manure or organic food waste as determined through EPA 160.3 testing method (U.S.EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020));

$VS_{\%}$ = Concentration (percent) of volatile solids in total solids as determined through EPA 160.4 testing method (USEPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)); and

VS_{avail} = Volatile solids available for degradation in manure or organic food waste storage each month as determined from the equation:

$$VS_{avail} = VS_p + {}^1/_2\ VS_{in} - VS_{out}$$

Where:

VS_p = Volatile solids present in manure or organic food waste storage at beginning of month (left over from previous month) (kg);

VS_{in} = Volatile solids added to manure or organic food waste storage during the course of the month (kg). The factor of $^1/_2$ is multiplied by this number to represent the average mass of volatile solids available for degradation for the entire duration of the month;

VS_{out} = Volatile solids removed from the manure or organic food waste storage for land application or export (assumed value based on standard farm practice); and

f = Van't Hoff-Arrhenius factor for the specific month as determined using the equation below. Using a base temperature of 30°C, the equation is as follows:

$$f = \exp[E \times (T_2 - T)]/[(GC \times T_1 \times T_2)]$$

Where:

f = conversion efficiency of VS to CH_4 per month;

E = Activation energy constant (15,175 cal/mol);

T_2 = Average monthly ambient temperature for farm (converted from °Celsius to °Kelvin) as determined from the nearest National Weather Service certified weather station (if reported temperature °C > 5°C; if reported temperature °C < 5°C, then F = 0.104);

T_1 = 303.16 (30° C converted to °K); and

GC = Ideal gas constant (1.987 cal/K mol); and

(C) The volume of CH_4 produced (ft^3) from degradation of volatile solids shall be calculated as follows:

$$V_m = (VS_{deg} \times B_o) \times 35.3147$$

Where:

V_m = Volume of CH_4 (ft^3);

VS_{deg} = Volatile solids degraded (kg); and

B_o = Manure or organic food waste type-specific maximum methane generation constant (m^3 CH_4/kg VS degraded). For dairy cow manure, B_o = 0.24 m^3 CH_4/kg VS degraded. The methane generation constant for other types of manure shall be those cited at U.S. EPA, *Inventory of U.S. Greenhouse*

Gas Emissions and Sinks: 1990-2001, Annex 3, Table A-162 (U.S. EPA, April 2007), unless the project sponsor proposes an alternate methane generation constant. If the project sponsor proposes to use a methane generation constant other than that provided in said Table A-162, the project sponsor shall provide justification and documentation to the commissioner or the commissioner's designee.

(4) Calculating emissions reductions. Emissions reductions shall be determined based on the potential emissions (in tons of CO_2e) of the CH_4 that would have been produced in the absence of the offset project under a baseline scenario that represents uncontrolled anaerobic storage conditions, as calculated pursuant to subdivision (3) of this subsection, and released directly to the atmosphere. Emissions reductions may not exceed the potential emissions of the digester, as represented by the annual volume of CH_4 produced by the anaerobic digester, as monitored pursuant to subdivision (5) of this subsection. If the project is a regional-type digester, CO_2 emissions due to transportation from the site where the manure or organic food waste was generated to the anaerobic digester shall be subtracted from the emissions reduction calculated pursuant to subdivision (3) of this subsection. Transportation related CO_2 emissions shall be determined through one of the following methods:

(A) Documentation of transportation fuel use for all shipments of manure or organic food waste to the anaerobic digester during each reporting year and a log of transport miles for each shipment. CO_2 emissions shall be determined through the application of an emissions factor for the fuel type used. If this option is chosen, the following emission factors shall be applied as appropriate:

(i) Diesel fuel: 22.912 lbs. CO_2/gallon;

(ii) Gasoline: 19.878 lbs. CO_2/gallon; or

(iii) Other fuel: submitted emission factor approved by the commissioner or the commissioner's designee; and

(B) Documentation of total tons of manure or organic food waste transported from off-site for input into the anaerobic digester during each reporting year, as monitored pursuant to subdivision (5)(A) of this subsection, and a log of transport miles and fuel type used for each shipment. CO_2 emissions shall be determined through the application of a ton-mile transport emission factor for the fuel type used. If this option is chosen, the following emission factors shall be applied as appropriate for each ton of manure delivered, and multiplied by the number of miles transported:

(i) Diesel fuel: 0.131 lbs. CO_2 per ton-mile;

(ii) Gasoline: 0.133 lbs. CO_2 per ton-mile; or

(iii) Other fuel: submitted emission factor approved by the commissioner or the commissioner's designee.

(5) Monitoring and verification requirements. Offset projects shall employ a system that provides metering of biogas volumetric flow rate and determination of CH_4 concentration. Annual monitoring and verification reports shall include monthly biogas volumetric flow rate and CH_4 concentration determination. Monitoring and verification shall also meet the following requirements:

(A) If the offset project is a regional-type digester, manure and organic food waste from each distinct supply source supplying to the anaerobic digester shall be sampled monthly to determine the amount of volatile solids present. Any emissions reduction shall be calculated according to mass of manure and organic food waste (kg) being digested and percentage of volatile solids present before digestion, consistent with the requirements at subdivisions (3) and (5)(C) of this subsection, and

apportioned accordingly. The project sponsor shall provide supporting material and receipts tracking the monthly receipt of manure and organic food waste (kg) used to supply the anaerobic digester from each manure supplier;

(B) If the offset project includes the digestion of organic food wastes eligible pursuant to subdivision (1)(A) of this subsection, organic food wastes shall be sampled monthly to determine the amount of volatile solids present before digestion, consistent with the requirements of subdivision (3) of this subsection, and apportioned accordingly;

(C) The project sponsor shall submit a monitoring and verification plan as part of the consistency application that includes a quality assurance and quality control program associated with equipment used to determine biogas volumetric flow rate and CH_4 composition. The monitoring and verification plan shall be specified in accordance with the monitoring requirements listed in Table 31a-5, Input Monitoring Requirements, as applicable. The monitoring and verification plan shall also include provisions for ensuring that measuring and monitoring equipment is maintained, operated, and calibrated based on manufacturer's recommendations, as well as provisions for the retention of maintenance records for audit purposes. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to subsection (i) of this section; and

(D) The project sponsor shall quarterly verify biogas CH_4 composition through gas sampling and third party laboratory analysis using applicable U.S. EPA test methods.

Table 31a-5
Input Monitoring Requirements

Input Parameter	Measurement Unit	Frequency of Sampling	Sampling Method or Methods
Influent flow (mass) into the digester	Kilograms (kg) per month (wet weight)	Monthly total into the digester	a) Average herd population and American Society of Agricultural and Biological Engineers (ASABE) standard (ASAE D384.2, March 2005) b) Digester influent pump flow c) Recorded weight
Influent total solids concentration (TS)	Percent (of sample)	Monthly, depending upon recorded variations	U.S. EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)
Influent volatile solids (VS) concentration	Percent (of TS)	Monthly, depending upon recorded variations	USEPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)
Average monthly ambient temperature	Temperature °C	Monthly (based on farm averages)	Closest National Weather Service-certified weather station

(i) **Accreditation of Independent Verifiers**

(1) Standards for accreditation. Independent verifiers may be accredited by the commissioner or the commissioner's designee to provide verification services as required of project sponsors under this section, provided that independent verifiers meet all of the requirements of this subsection.

(A) Persons selected to perform verification services shall:

(i) Demonstrate knowledge of utilizing engineering, accounting and auditing principles sufficient to quantify greenhouse gas emissions, and develop and evaluate air emissions inventories;

(ii) Demonstrate knowledge of information management systems;

(iii) Demonstrate knowledge of the requirements of this section and section 22a-174-31 of the Regulations of Connecticut State Agencies;

(iv) Demonstrate that no direct or indirect financial relationship, beyond a contract for provision of verification services, exists with any offset project developer or sponsor;

(v) Employ staff with, knowledge, experience, and where appropriate, professional licenses appropriate to the specific category(ies) of offset projects specified in subsections (d) to (h), inclusive, of this section that they seek to verify;

(vi) Certify that such person holds a minimum of one million U.S. dollars of professional liability insurance. If the insurance is in the name of a related entity, the verifier shall disclose the financial relationship between the verifier and the related entity, and provide documentation supporting the description of the relationship; and

(vii) Demonstrate that adequate protocols are established to avoid conflicts of interest with regard to an offset project, offset project developer, or project sponsor, or any other party with a direct or indirect financial interest in an offset project that is seeking or has been granted an approval under subsection (c) of this section; and

(B) Applicants shall possess such other qualifications as may be required by the commissioner to provide competent verification services for individual CO_2 emissions offset categories specified in subsections (d) to (h), inclusive, of this section.

(2) Pre-qualification of verifiers. The commissioner or the commissioner's designee may require prospective independent verifiers to successfully complete a training course, workshop or test developed by the commissioner or the commissioner's designee prior to submitting an application for accreditation.

(3) Application for accreditation. An independent verifier shall submit an application for accreditation to the commissioner. The application shall include sufficient information to demonstrate that the applicant meets all accreditation standards required at subdivisions (1)(A)(i) to (vii), inclusive, of this subsection. The independent verifier's application for accreditation shall:

(A) Provide the applicant's name, address, e-mail address, telephone number, and facsimile transmission number;

(B) Demonstrate that the applicant has at least two years of experience in each of the knowledge areas specified in subdivisions (1)(A)(i) and (ii) of this subsection, and as may be required pursuant to subdivision (1)(B) of this subsection;

(C) Verify that the applicant has successfully completed the requirements of subdivision (2) of this subsection, as applicable;

(D) Include a sample of at least one non-proprietary work product that provides supporting evidence that the applicant meets the requirements, as applicable, in subdivision (1)(A) of this subsection. The work product shall have been produced, in whole or part, by the applicant and shall consist of a final report or other material

provided to a client under contract in previous work. For a work product that was jointly produced by the applicant and another entity, the role of the applicant in the work product shall be clearly explained;

(E) Provide documentation that the applicant holds professional liability insurance as required pursuant to subdivision (1)(A)(vi) of this subsection; and

(F) Provide documentation that the applicant has implemented an adequate management protocol required pursuant to subdivision (1)(A)(vii) of this subsection to address and remedy any conflict of interest issues that may arise.

(4) The commissioner shall approve or deny a complete application for accreditation not later than 90 days after submission. Upon approval of an application for accreditation, the independent verifier shall be accredited for a period of three years from the date of application approval.

(5) Independent verifiers that have been accredited in other participating states shall be deemed accredited in Connecticut.

(6) Conduct of accredited verifiers.

(A) Prior to engaging in verification services for an offset project sponsor, the accredited verifier shall disclose all relevant information to the commissioner or the commissioner's designee to allow for an evaluation of potential conflict of interest with respect to an offset project, offset project developer, or project sponsor. The accredited verifier shall disclose information concerning its ownership, past and current clients, related entities, as well as any other facts or circumstances that have the potential to create a conflict of interest;

(B) Accredited verifiers shall have an ongoing obligation to disclose to the commissioner or the commissioner's designee any facts or circumstances that may give rise to a conflict of interest with respect to an offset project, offset project developer, or project sponsor;

(C) Rejection of verification reports. The commissioner or the commissioner's designee may reject a verification report and certification statement from an accredited verifier, that is submitted as part of a consistency application required pursuant to subsection (c) of this section or submitted as part of a monitoring and verification report submitted pursuant to subsection (j) of this section, if the commissioner or the commissioner's designee determines that the accredited verifier has a conflict of interest related to the offset project, offset project developer, or project sponsor; and

(D) Revocation of accreditation. The commissioner or the commissioner's designee may revoke the accreditation of a verifier at any time given cause, for any of the following:

(i) Failure to fully disclose any issues that may lead to a conflict of interest situation with respect to an offset project, offset project developer, or project sponsor;

(ii) Lack of qualification due to changes in staffing or other criteria;

(iii) Negligence or neglect of responsibilities pursuant to the requirements of this section; and

(iv) Intentional misrepresentation of data or other intentional fraud.

(j) **Award and Recordation of CO_2 Offset Allowances**

(1) Quantities of CO_2 offset allowances awarded. Following the issuance of a consistency determination under subsection (c)(12) of this section and the approval of a monitoring and verification report under the provisions of subdivision (5) of this subsection, the commissioner or their designee shall award one CO_2 offset allowance for each ton of demonstrated reduction in CO_2 or CO_2 equivalent emissions or sequestration of CO_2.

(2) CO_2 emissions credit retirement. If a project sponsor received a consistency determination pursuant to subsection (c)(12) of this section, one CO_2 offset allowance shall be awarded for each ton of reduction of CO_2 or CO_2 equivalent or sequestration of CO_2, represented by the relevant credits or allowances retired. If a credit or allowance is represented in metric tons, 1.1023 tons shall be awarded for every metric ton, provided that total CO_2 offset allowances awarded shall be rounded down to the nearest whole ton.

(3) Recordation of CO_2 offset allowances. After CO_2 offset allowances are awarded under this subsection the commissioner or the commissioner's designee shall record such CO_2 offset allowances in the project sponsor's general account.

(4) Place for filing monitoring and verification reports. The monitoring and verification report shall be filed with the same participating state that issued the consistency determination for the offset project pursuant to subsection (c)(12) of this section.

(5) Deadlines for submittal of monitoring and verification reports.

(A) For CO_2 emissions offset projects undertaken prior to January 1, 2009, the project sponsor shall submit the monitoring and verification report covering the pre-2009 period no later than June 30, 2009; and

(B) For CO_2 emissions offset projects undertaken on or after January 1, 2009, the monitoring and verification report shall be submitted not later than 6 months following the completion of the last calendar year during which the offset project achieved CO_2 equivalent reductions or sequestration of CO_2 for which the project sponsor seeks the award of CO_2 offset allowances.

(6) Contents of monitoring and verification reports. For an offset project, the monitoring and verification report shall include the following information:

(A) The project's sponsor's name, address, e-mail address, telephone number, facsimile transmission number, and account number;

(B) The CO_2 emissions reduction or CO_2 sequestration determination as required by the relevant provisions of this section, including a demonstration that the project sponsor complied with the required quantification, monitoring, and verification procedures under this section, as well as those outlined in the consistency application approved pursuant to subsection (c)(12) of this section;

(C) The following statement signed by the offset project sponsor:

''The undersigned project sponsor hereby confirms and attests that the offset project upon which this monitoring and verification report is based is in full compliance with all of the requirements of Section 22a-174-31a of the Regulations of Connecticut State Agencies. The project sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. I understand that eligibility for the award of CO_2 offset allowances under Section 22a-174-31a of the Regulations of Connecticut State Agencies is contingent on meeting the requirements of said section. I authorize the commissioner or the commissioner's designee to audit this offset project for purposes of verifying that the offset project, including the monitoring and verification plan, has been implemented as described in the consistency application that was the subject of a consistency determination by the commissioner or the commissioner's designee. I understand that this right to audit shall include the right to enter the physical location of the offset project. I submit to the legal jurisdiction of the State of Connecticut.''; and

(D) A verification report and certification statement signed by an independent verifier accredited pursuant to subsection (i) of this section documenting that the independent verifier has reviewed the monitoring and verification report and evalu-

ated the following in relation to the applicable requirements of this section, and any applicable guidance issued by the commissioner or the commissioner's designee. Such verification report and certification statement shall also include:

(i) A statement of the adequacy and validity of information supplied by the project sponsor to determine CO_2 emissions reductions or CO_2 sequestration pursuant to the applicable requirements of this section;

(ii) A statement of the adequacy and consistency of methods used to quantify, monitor, and verify CO_2 emissions reductions and CO_2 sequestration in accordance with the applicable requirements of this section and as outlined in the consistency application approved pursuant to subsection (c)(12) of this section; and

(iii) Such other evaluations and verification reviews as may be required by the commissioner or the commissioner's designee to determine the adequacy and validity of information supplied by the project sponsor and to demonstrate that the offset project meets the applicable eligibility requirements of this section;

(E) Disclosure of any voluntary or mandatory programs, other than the CO_2 Budget Trading Program, to which greenhouse gas emissions data related to the offset project has been, or will be reported; and

(F) For offset projects located in a state or United States jurisdiction that is not a participating state, a demonstration that the project sponsor has complied with all requirements of the cooperating regulatory agency in the state or United States jurisdiction where the offset project is located.

(7) Commissioner action on monitoring and verification reports. The commissioner or the commissioner's designee shall approve or deny, with or without conditions, a complete monitoring and verification report not later than 90 days following receipt of a complete report.

(Adopted effective July 23, 2008)

Sec. 22a-174-32. Reasonably available control technology (RACT) for volatile organic compounds

(a) **Definitions.** For the purposes of this section:

(1) ''Aerospace manufacturing and rework operations'' means the production or repair of aerospace vehicles or components thereof under any of the following Standard Industrial Classification Codes: 3720, 3721, 3724, 3728, 3760, 3761, 3764, 3769, 4512, 4581, or 9711.

(2) ''Aerospace vehicle or component'' means any fabricated part, processed part, assembly of parts, or completed unit of any aircraft including, but not limited to, airplanes, helicopters, missiles, rockets, and space vehicles.

(3) ''Antique aerospace vehicle or component'' means an aircraft or component thereof which is at least thirty years of age and is no longer routinely used in the original commercial or military service capacity.

(4) ''CTG'' or ''control techniques guideline'' means a document published by the Administrator in accordance with sections 108, and 183(a) and (b) of the Clean Air Act (42 U.S.C. section 7401, et seq.) describing techniques for controlling volatile organic compound (VOC) emissions.

(5) ''Space vehicle'' means a man-made vehicle, either manned or unmanned, designed for operation beyond the atmosphere of the Earth, including but not limited to, models, prototypes, molds, tooling, hardware, and any auxiliary equipment associated with the testing, transportation and storage of such vehicle.

(6) ''System to capture and control'' means a system to capture, convey and control VOC emissions released by VOC-emitting equipment, including any device

that destroys, recovers, or otherwise removes VOC emissions and permanently reduces VOC emissions into the atmosphere.

(7) ''Uncontrolled VOC emissions'' means VOC emissions prior to the application of a system to capture and control such VOC emissions.

(8) ''Volatile organic compound'' or ''VOC'' has the same meaning as in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(9) ''VOC-emitting equipment'' means any equipment, building, or activity that results in the emission of volatile organic compounds through a stack or as fugitive emissions.

(10) ''Wood furniture'' means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particle board that is manufactured under any of the following Standard Industrial Classification Codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

(11) ''Wood furniture component'' means any part that is used in the manufacture of wood furniture, including but not limited to, drawer slides, cabinet doors, seat cushions, and laminated tops.

(12) ''Wood furniture manufacturing operations'' means the finishing, cleaning and wash off operations associated with the production of wood furniture, or wood furniture components.

(b) **Applicability.**

(1) Subject to the limitations set forth in subdivision (4) of this subsection, the provisions of this section shall apply to:

(A) except as provided in subparagraphs (C) and (D) of this subdivision, the owner or operator of a premises with potential VOC emissions of fifty (50) tons or more per calendar year in a serious nonattainment area for ozone;

(B) except as provided in subparagraphs (C) and (D) of this subdivision, the owner or operator of a premises with potential VOC emissions of twenty-five (25) tons or more per calendar year in a severe nonattainment area for ozone;

(C) the owner or operator of wood furniture manufacturing operations with potential VOC emissions of twenty-five (25) tons or more per calendar year; or

(D) the owner or operator of aerospace manufacturing and rework operations with potential VOC emissions of twenty-five (25) tons or more per calendar year.

(2) When calculating potential emissions for the purposes of this section, any limitation on the capacity of a source to emit VOCs, including air pollution control equipment, or any restriction which limits maximum rated capacity shall be treated as part of the design of the source, only if such limitation or restriction or the effect that such limitation or restriction would have on VOC emissions is federally enforceable.

(3) When calculating potential emissions to determine the applicability of this section, the owner or operator of a premises shall include potential emissions of volatile organic compounds from all sources located at such premises excluding those sources which are:

(A) subject to regulation under 40 CFR 61 and 63;

(B) required to use Best Available Control Technology or Lowest Achievable Emission Rate for VOCs pursuant to a federally enforceable order or permit which contains specific VOC emission limitations;

(C) subject to regulation under 40 CFR 264, Subparts AA or BB, or 40 CFR 265, Subparts AA or BB;

(D) fuel burning equipment; or

(E) subject to Reasonably Available Control Technology required pursuant to:

(i) any one of the following subsections of section 22a-174-20 of the Regulations of Connecticut State Agencies: (a), (b), (*l*) through (y), or (ff) through (jj),

(ii) section 22a-174-30 of the Regulations of Connecticut State Agencies, or

(iii) an order or permit requiring the implementation of Reasonably Available Control Technology issued by the commissioner prior to November 15, 1992 and approved by the Administrator prior to May 31, 1995.

(4) Except for subparagraph (B) of subdivision (d)(2) and subsections (f) and (g) of this section, no other provisions of this section shall apply to the owner or operator of VOC emitting equipment which is identified in, or subject to any requirement set forth in, subparagraphs (A) through (E) of subdivision (3) of this subsection.

(c) **Individual permits, general permits or orders to limit VOC emissions.**

(1) The commissioner may issue an individual permit, general permit or order in lieu of requiring one of the Reasonably Available Control Technology methods required by subdivision (e)(1) of this section when the owner or operator of a premises demonstrates to the commissioner's satisfaction that actual emissions of VOCs from such premises did not exceed, in every calendar year after December 31, 1995:

(A) except as provided in subparagraph (C) of this subdivision, fifty (50) tons per calendar year in a serious nonattainment area for ozone;

(B) except as provided in subparagraph (C) of this subdivision, twenty-five (25) tons per calendar year in a severe nonattainment area for ozone; or

(C) twenty-five (25) tons per calendar year at a premises which conducts wood furniture manufacturing operations or aerospace manufacturing and rework operations.

(2) An owner or operator of a premises who seeks to demonstrate that actual emissions do not exceed the levels specified in subdivision (1) of this subsection shall, at a minimum, submit to the commissioner written documentation of the actual emissions from such premises for every calendar year, or portion thereof, from December 31, 1995 through the calendar year in which such information is submitted. The commissioner may require the submittal of documentation of actual emissions from another period of time in order to determine representative actual emissions. Such owner or operator shall also submit a report which includes the information specified in subparagraphs (B) through (E), inclusive, of subdivision (d)(2) of this section.

(3) If the commissioner issues an individual permit, general permit or order pursuant to this subsection, such permit or order shall require that the emissions of VOCs from a premises not exceed the VOC emissions levels set forth in subdivision (1) of this subsection or a level established by the Administrator in a final CTG. The commissioner shall submit such individual permit, general permit or order to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq. The commissioner shall require a permittee or any person subject to an order of the commissioner under this subdivision to make and keep records, as may be necessary, to demonstrate compliance with the emission limitations set forth in subdivision (1) of this subsection.

(4) Nothing herein shall require the commissioner to issue an individual permit, general permit or order under this subsection.

(d) **Compliance plans.**

(1) In order to demonstrate compliance with the provisions of this section, the owner or operator of a premises subject to this section shall submit to the commis-

sioner in writing a compliance plan for review and written approval or denial. Such compliance plan shall be submitted no later than:

(A) May 1, 1994 for premises subject to this section on or before April 19, 1994;

(B) May 1, 1995 for premises subject to this section from April 20, 1994 through the effective date of this section; or

(C) six months after becoming subject to the provisions of this section.

(2) A compliance plan submitted in accordance with subdivision (1) of this subsection, shall include:

(A) a description of the Reasonably Available Control Technology method that the owner or operator shall perform pursuant to subdivision (e)(1) of this section;

(B) a description of each and every piece of VOC-emitting equipment at such premises;

(C) the maximum rated capacity of each piece of VOC-emitting equipment;

(D) the total amount of potential emissions of VOCs, expressed in tons per year; and

(E) a certification, signed by the person who prepared the compliance plan, the owner of the premises, and the operator of the premises, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate and complete, and each of whom shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this compliance plan and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the General Statutes, under Section 53a-157b of the General Statutes, and in accordance with any other applicable statute.''

(3) The owner or operator of a premises who proposes to install a system to capture and control VOCs pursuant to subparagraph (A) of subdivision (e)(1) of this section shall also include in the compliance plan the following:

(A) a description of such system to capture and control; and

(B) a schedule for installing such system.

(4) The owner or operator of a premises reducing VOC use and VOC emissions pursuant to subparagraph (B) of subdivision (e)(1) of this section shall also include in the compliance plan the following:

(A) with respect to each coating used at a premises during the preceding calendar year, the following information:

(i) the name and address of the coating manufacturer,

(ii) the coating name and identification number,

(iii) the coating density, in pounds per gallon,

(iv) the percent VOC content by weight,

(v) the water and exempt percent VOC content by weight,

(vi) the solids content by volume and by weight in pounds,

(vii) the amount of each coating used, in gallons,

(viii) the total amount of diluent used for each coating, in pounds and in gallons, and

(ix) the coating viscosity in pounds VOC per pounds solid, or in kilograms VOC per kilogram solid;

(B) a calculation of the weighted arithmetic mean of the VOC content of all coatings used at the premises during the preceding calendar year, expressed in terms of pounds of VOCs per gallon of solids; and

(C) to demonstrate compliance with subparagraph (B) of subdivision (e)(1) of this section, the owner or operator shall submit the following information with respect to each coating planned for use:

(i) the name and address of the coating manufacturer,

(ii) the coating name and identification number,

(iii) the coating density, in pounds per gallon,

(iv) the percent VOC content by weight,

(v) the percent water and percent exempt VOC content by weight,

(vi) the solids content by volume and by weight in pounds,

(vii) the total amount of diluent proposed to be used for each coating, in pounds and in gallons, and

(viii) the coating viscosity in pounds VOC per pounds solid;

(5) The owner or operator of a premises using alternative emission reductions or emission reduction credits pursuant to subparagraph (C) of subdivision (e)(1) of this section shall also include in the compliance plan the following:

(A) the information required pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies; or

(B) a proposed plan to purchase emission reduction credits.

(6) The owner or operator of a premises using the alternative compliance plan method pursuant to subparagraph (D) of subdivision (e)(1) of this section shall submit such alternative compliance plan for the commissioner's review and written approval or denial. The alternative compliance plan, in addition to meeting the requirements of subdivision (2) of this subsection and the applicable provisions set forth in subdivisions (3) through (5), inclusive, of this subsection, shall also include the following:

(A) an examination of the technological and economic feasibility of additional VOC control devices or equipment on all sources of VOCs, including those sources identified in subdivision (b)(3) of this section;

(B) an examination of the feasibility of changing to low VOC-emitting processes including establishing a leak detection program;

(C) the proposed amount of VOC reduction from all subject VOC-emitting equipment at the premises;

(D) an examination of the feasibility of obtaining emission reduction credits pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies, or of the feasibility of using alternative emission reductions to achieve equivalent levels of control as required by subparagraphs (A) or (B) of subdivision (e)(1) of this section;

(E) a description of any research that will be conducted by the owner or operator to further reduce VOC emissions beyond the level of emissions proposed; and

(F) any other information the commissioner may require.

(7) In lieu of submitting a compliance plan in accordance with the provisions of this subsection and in lieu of installing one of the Reasonably Available Control Technology methods pursuant to subdivision (e)(1) of this section, the commissioner may allow the owner or operator of a premises to meet the requirements of this section by permit or order, provided such permit or order implements the recommended CTG or emissions limitations of a final CTG for any source category identified in the Federal Register on April 28, 1992 (57 Fed. Reg. 18077, App. E), and such permit

or order is submitted by the commissioner to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq.

(8) Notwithstanding the provisions of subdivision (7) of this subsection, nothing herein shall require the commissioner to issue such permit or order.

(e) **Reasonably Available Control Technology methods.**

(1) One year after becoming subject to the provisions of this section, the owner or operator of a premises subject to the requirements of this section shall perform at least one of the following Reasonably Available Control Technology methods:

(A) install and operate pursuant to subdivision (2) of this subsection a system to capture and control VOCs;

(B) implement a program of reformulation or process change pursuant to subdivision (3) of this subsection to reduce VOC use and VOC emissions;

(C) use alternative emission reductions or emission reduction credits, pursuant to subdivision (4) of this subsection, in accordance with a permit or order issued by the commissioner; or

(D) implement an alternative compliance plan pursuant to subdivision (5) of this subsection, in accordance with a permit or order issued by the commissioner.

(2) When the owner or operator of a premises installs and operates a system to capture and control VOC emissions, then:

(A) such system shall reduce VOC emissions to the atmosphere from any VOC emitting equipment which is subject to the provisions of this section by at least eighty-five percent (85%) of uncontrolled emissions;

(B) such system, if designed to destroy VOCs by incineration, shall oxidize into carbon dioxide and water at least ninety-five percent (95%) of the non-methane VOCs, measured as total combustible carbon, which enter the incinerator each hour; and

(C) such system, if designed to recover or otherwise remove VOCs, shall be operated so that the VOC mass emission rate leaving the outlet does not exceed ten percent (10%), in the aggregate, of the VOC mass emission rate entering such system.

(3) When the owner or operator of a premises reformulates or changes a process or processes to reduce actual VOC use and VOC emissions, such reformulation or change shall achieve, for each coating or VOC-emitting equipment used and on each day that VOCs are emitted, an eighty percent (80%) reduction in VOC emissions from the weighted arithmetic mean during calendar year 1990 or another year the commissioner deems as more representative of the actual operating conditions or actual emissions calculated pursuant to subparagraph (B) of subdivision (d)(4) of this section.

(4) The owner or operator of a premises subject to a final CTG shall comply with the requirements of such final CTG, in accordance with subdivision (d)(7), where such final CTG achieves a greater reduction in VOCs than the requirements of subdivisions (2) or (3) of this subsection.

(5) When an owner or operator of a premises uses either alternative emission reductions pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies or emission reduction credits, equivalent emission reductions to those required by subparagraph (B) of subdivision (2) of this subsection shall be achieved. In addition, any such use or purchase of emission reduction credits shall be consistent with the United States Environmental Protection Agency's ''Economic Incentive Program Rules; Final Rule,'' of April 7, 1994 (59 Fed. Reg. 16690), and the United States Environmental Protection Agency's ''Emission Trading Policy Statement'' of December 4, 1986 (51 Fed. Reg. 43814). The commissioner may

only allow the use of either alternative emission reductions pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies or emission reduction credits through the issuance of a permit or order. The commissioner shall submit such permit or order to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq. Nothing herein shall require the commissioner to issue such permit or order.

(6) The commissioner may issue a permit or order to the owner or operator of a premises requiring the implementation of an alternative compliance plan when it is demonstrated, to the commissioner's satisfaction, through the information submitted pursuant to subdivision (d)(2) and (d)(6) of this section, that compliance with subparagraphs (1)(A) through (1)(C) of this subsection, inclusive, is not technologically or economically feasible. Such permit or order shall specify that the implementation of the approved alternative compliance plan shall be Reasonably Available Control Technology for such premises. Such owner or operator shall implement the alternative compliance plan by the date specified in the permit or order, which date shall be no later than ninety days after issuance of such permit or order. In issuing such a permit or order the commissioner may consider the VOC emissions and the VOC emission reductions made at the premises after 1986. The commissioner shall submit such permit or order to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq.

(7) Notwithstanding the provisions of subdivision (6) of this subsection, nothing herein shall require the commissioner to issue such permit or order.

(f) **Test Methods.**

(1) Upon written notification that the commissioner shall require emissions testing to demonstrate compliance with this section or any permit or order issued hereunder, the owner or operator of a premises shall conduct such testing in accordance with such notification and section 22a-174-5 of the Regulations of Connecticut State Agencies.

(2) Where an owner or operator uses a system to capture and control VOC emissions pursuant to subparagraph (A) of subdivision (e)(1) of this section, compliance with this section shall be demonstrated by using the sampling and analytical procedures set forth in 40 CFR Part 60, Appendix A or 40 CFR Part 52.741, Appendix B.

(3) Where an owner or operator uses any Reasonably Available Control Technology methods pursuant to subparagraphs (B) through (D) inclusive of subdivision (e)(1) of this section, the commissioner may require compliance with this section be demonstrated by:

(A) using sampling and analytical procedures set forth in 40 CFR Part 60, Appendix A;

(B) using a mass balance procedure based on known quantities of materials purchased, stored in inventory, and/or reclaimed using good engineering practice, as approved by the commissioner; or

(C) using other methods or procedures approved by the Administrator.

(g) **Record keeping.**

(1) After December 31, 1996, the owner or operator of a premises shall maintain for at least five years at such premises, and make available at such premises for the commissioner's inspection upon demand, the following:

(A) purchase records for all materials which are used or stored at such premises which contain VOCs;

(B) for any VOC emissions resulting from coating operations, records of the name of each coating, the coating density expressed in pounds per gallon or pounds

per unit, the percent VOC content by weight of each coating, the percent solids content by weight, the water and exempt VOC content of each coating by weight, the amount of each coating used in gallons, the total amount of diluent used for each coating in pounds and in gallons, and the coating viscosity in pounds VOC per pounds solid or in kilograms VOC per kilogram solids; and

(C) the results of any VOC emissions testing performed pursuant to subsection (f) of this section.

(2) The owner or operator of a premises shall make, keep and maintain for at least five years at such premises any other records required to kept by an individual permit, general permit or order.

(Effective November 18, 1993; amended August 27, 1999, April 6, 2010)

Sec. 22a-174-33. Title V sources

(a) **Definitions**. For the purposes of this section:

(1) ''Alternative operating scenario'' means a condition, including equipment configurations, process parameters, or materials used in a process under which the owner or operator of a Title V source may be allowed to operate.

(2) ''Applicable requirements'' means:

(A) Any standard or other requirement in the State implementation plan or in a federal implementation plan for the State of Connecticut promulgated by the Administrator pursuant to the Act;

(B) Any term or condition of a permit issued pursuant to former section 22a-174-3 or section 22a-174-3a of the Regulations of Connecticut State Agencies;

(C) Any standard or other requirement of the acid rain program pursuant to 40 CFR Parts 72 to 78, inclusive; and

(D) Any standard or other requirement pursuant to 40 CFR 51, 52, 59, 60, 61, 62, 63, 64, 68, 70, OR 82.

(3) ''Code of Federal Regulations'' or ''CFR'' means the Code of Federal Regulations as amended from time to time.

(4) ''Deviation'' means ''deviation'' as defined in 40 CFR 71.6(a)(3)(iii)(C).

(5) ''Hazardous air pollutant'' means, notwithstanding the definition in section 22a-174-1 of the Regulations of Connecticut State Agencies, any air pollutant listed in section 112(b) of the Act excluding hydrogen sulfide and caprolactam.

(6) ''Implementation date of this section'' means April 23, 1997.

(7) ''Regulated air pollutant'' means any of the following:

(A) Nitrogen oxides or any volatile organic compound;

(B) Any pollutant which is a criteria air pollutant as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies;

(C) Any pollutant emitted by a stationary source which is subject to any standard of performance for new stationary sources pursuant to 40 CFR 60;

(D) Any pollutant from a substance subject to a stratospheric ozone protection requirement pursuant to 40 CFR 82, Subpart A, Appendix A or B;

(E) Any pollutant subject to a national emission standard or other requirement pursuant to 40 CFR 63, and emitted by a source in a category listed in the Federal Register in accordance with section 112(e)(3) of the Act;

(F) Any pollutant from a stationary source which is subject to any standard or other requirement pursuant to 40 CFR 61;

(G) Any pollutant listed in 40 CFR 68; or

(H) Greenhouse gases.

(8) ''Research and development operation'' means any activity which:

(A) Occurs in a laboratory;

(B) Is intended to (i) discover scientific facts, principles or substances, or (ii) establish methods of manufacture or design of saleable substances, devices or other products, based upon previously discovered scientific facts, principles or substances; and

(C) Does not include (i) production for sale of established products through established processes, or (ii) production of a product for distribution through market testing channels.

(9) ''Title V permit'' means any permit issued, renewed, or modified by the commissioner pursuant to this section.

(10) ''Title V source'' means any premises at, in, or on which any of the following is located:

(A) Any stationary source subject to 40 CFR 60 or 61;

(B) Any stationary source subject to 40 CFR 62, 63 or 68;

(C) Any stationary source subject to 40 CFR 72 to 78, inclusive;

(D) Any stationary source subject to section 129(e) of the Act;

(E) Any one or more stationary sources, which are located on one or more contiguous or adjacent properties under the control of the same person or persons and which in the aggregate emit, or have the potential to emit, including fugitive emissions, ten (10) tons or more per year of any hazardous air pollutant, or twenty-five (25) tons or more per year of any combination of hazardous air pollutants; or

(F) Any one or more stationary sources, which are located on one or more contiguous or adjacent properties under the control of the same person or persons and which belong to the same two-digit Standard Industrial Classification code, as published by the United States Office of Management and Budget in the Standard Industrial Classification Manual of 1987, and which in the aggregate emit, or have the potential to emit any air pollutant, including fugitive emissions, from those categories of sources listed in subdivision (2) in the definition of ''major source'' in 40 CFR 70.2 as of August 2, 2010, of:

(i) one hundred (100) tons or more per year of any regulated air pollutant that is not a GHG,

(ii) fifty (50) tons or more per year of volatile organic compounds or nitrogen oxides in a serious ozone non-attainment area,

(iii) twenty-five (25) tons or more per year of volatile organic compounds or nitrogen oxides in a severe ozone non-attainment area, or

(iv) 100,000 tons or more per year of GHG (CO_2e basis) and 100 tons or more per year of GHG (mass basis); and

(G) Notwithstanding the provisions of subparagraph (F) of this subdivision, any landfill containing only municipal solid waste, as that term is defined in section 22a-207(23) of the Connecticut General Statutes, shall not be considered a Title V source unless such landfill:

(i) is subject to any applicable requirement identified in subparagraph (B) or (D) of this subdivision, or

(ii) emits, or has the potential to emit, equal to or greater than:

(I) one hundred (100) tons per year of GHG (mass basis), and

(II) 100,000 tons per year of GHG (CO_2e basis).

(b) **Signatory Responsibilities**.

An application for a Title V permit, any form, report, compliance certification or other document required by a Title V permit, and any other information submitted by an owner or operator or a permittee pursuant to this section shall be signed in

accordance with section 22a-174-2a(a) of the Regulations of Connecticut State Agencies.

(c) **Applicability**.

(1) The provisions of this section shall apply to the owner or operator of every Title V source.

(2) Notwithstanding subdivision (1) of this subsection and except as provided in subdivision (3) of this subsection, this section shall not apply to any premises which is defined as a Title V source solely because a stationary source on such premises is subject to one or more of the following:

(A) Standard of performance for new residential wood heaters pursuant to 40 CFR 60, Subpart AAA;

(B) 40 CFR 61.145;

(C) Accidental release requirements pursuant to 40 CFR 68; or

(D) 40 CFR 60, 61, 63, 68 or 72, if such source is exempt or deferred from the requirement to obtain a Title V permit:

(i) by the terms of the applicable CFR,

(ii) by the terms of 40 CFR 70,

(iii) by the Administrator, or

(iv) with the Administrator's authorization, by the commissioner.

(3) Notwithstanding the definition of a Title V source set forth in subsection (a) of this section, for the purpose of determining whether this section applies to a premises at which research and development operations are located, the owner or operator of such premises may calculate the emissions from such premises by subtracting the emissions from such research and development operations from the total emissions of such premises. The emissions from the remainder of such premises and research and development operations shall be separately evaluated by the commissioner for purposes of determining whether Title V permits are required for each portion of such premises.

(4) If the commissioner or administrator determines that the owner or operator of any Title V source that is subject to a Title V general permit issued under this section has not complied with such general permit, such noncompliance shall be a violation of this section and such owner or operator shall be deemed to have been operating a Title V source without a Title V permit.

(5) If the commissioner or administrator determines that the owner or operator of any Title V source that is subject to a Title V general permit issued under this section has not qualified for applicability under such general permit, such noncompliance shall be a violation of this section and such owner or operator shall be deemed to have been operating a Title V source without a Title V permit.

(d) **Limitations on Potential to Emit.**

(1) In lieu of requiring an owner or operator of a Title V source described in subsection (a)(10)(E) or (F) of this section to obtain a Title V permit, the commissioner may, by permit or by order, limit all aggregate potential emissions of regulated air pollutants from such premises to less than the following amounts:

(A) One hundred (100) tons per year of any regulated air pollutant;

(B) Fifty (50) tons per year of volatile organic compounds or nitrogen oxides, in a serious ozone nonattainment area;

(C) Twenty-five (25) tons per year of volatile organic compounds or nitrogen oxides, in a severe ozone nonattainment area;

(D) Ten (10) tons per year of any hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants, or the quantity established by the Administrator pursuant to 40 CFR 63; or

(E) 100,000 tons per year of CO_2e.

(2) A permit or order issued pursuant to this subsection shall require the owner or operator of the subject premises to:

(A) Limit potential emissions at such premises to less than the amounts specified in subparagraphs (A) to (E), inclusive, of subdivision (1) of this subsection;

(B) Conduct monitoring, recordkeeping, or a combination of monitoring and recordkeeping sufficient to ensure compliance with such permit;

(C) Maintain all records required by such permit or order at the premises for five (5) years after the creation of such records and make such records available, upon request, to the commissioner;

(D) Submit compliance certifications to the commissioner pursuant to subdivision (q)(2) of this section; and

(E) Comply with every term, emission limitation, condition, or other requirement of such permit or order, including the requirements that the terms, limitations and conditions of such permit or order are binding and legally enforceable, and that the emissions allowed are quantified.

(3) A permit or order shall not be issued pursuant to this subsection, and any such permit or order shall not be federally enforceable, unless the commissioner:

(A) Requires to owner or operator of a subject premises to comply with each provision of subdivision (2) of this subsection;

(B) For a general permit, complies with the requirements for notice and opportunity for public comment pursuant to section 22a-174 of the Connecticut General Statutes;

(C) For an individual order, sends a copy of a notice to those listed in subparagraph (D)(i) to (vi), inclusive, of this subdivision, and, at least thirty (30) days before approving or denying a proposed order under this subsection, publishes or causes to be published, at the respondent's expense, once in a newspaper having substantial circulation in the affected area, such notice of the proposed order regarding the subject premises. In addition, the commissioner may require the owner or operator to publish such notice in other media and in languages other than English. Such notice shall contain the following:

(i) the name and mailing address of the owner or operator of the subject premises and the address of the location of the proposed activity,

(ii) the draft order number,

(iii) the summary of the draft order provisions regarding the proposed activity,

(iv) the type of authorization sought, including a reference to the applicable statute or regulation,

(v) a description of the location of the proposed activity and any natural resources affected thereby,

(vi) the name, address and telephone number of any agent of the owner or operator from whom interested persons may obtain copies of the draft order,

(vii) a brief description of all opportunities for public participation provided by statute or regulation, including the length of time available for submission of public comments to the commissioner on the draft order, and

(viii) such additional information as the commissioner deems necessary to comply with any provision of the Regulations of Connecticut State Agencies or with the Act; and

(D) For a tentative determination regarding a permit application under this subsection, other than a general permit, sends a copy of the notice required by section 22a-6h of the Connecticut General Statutes to those identified in, and as required

by, section 22a-174-2a(b)(5)(A) to (G) inclusive, of the Regulations of Connecticut State Agencies.

(4) Following receipt of a request for a public hearing pursuant to section 22a-174-2a(c)(6) of the Regulations of Connecticut State Agencies, the commissioner shall publish a notice of such public hearing at the owner or operator's expense in a newspaper of general circulation in the affected area at least thirty (30) days prior to such hearing. In addition, the commissioner may require the owner or operator to publish such notice in other media and in languages other than English.

(5) The commissioner shall not issue any permit or order pursuant to this subsection which waives or makes less stringent any limitation, standard or requirement contained in or issued pursuant to the State implementation plan or that is otherwise federally enforceable, including any standard established in 40 CFR 63.

(6) The commissioner shall provide the Administrator with a copy of any general permit issued pursuant to this subsection.

(7) Notwithstanding a permit or order issued pursuant to subdivision (1) of this subsection, the owner or operator of any premises subject to this section shall pay the department all fees required by section 22a-174-26 of the Regulations of Connecticut State Agencies.

(8) Notwithstanding the provisions of section 22a-174(l) of the Connecticut General Statutes, the commissioner shall not issue a general permit covering a stationary source subject to any standard or other requirement pursuant to 40 CFR 72 to 78, inclusive.

(9) If the commissioner or administrator determines that the owner or operator of any premises that is subject to a general permit issued under this section has not qualified for applicability under such general permit, such noncompliance shall be a violation of this section and such owner or operator shall be deemed to have been operating a Title V source without a Title V permit.

(10) If the commissioner or administrator determines that the owner or operator of any premises that is subject to a permit or order issued under this subsection has not complied with the terms or conditions of such permit or order, such noncompliance shall be a violation of this section and such owner or operator shall be deemed to have been operating a Title V source without a Title V permit.

(11) The commissioner shall submit this subsection for approval by the administrator pursuant to Title I of the Act to authorize the issuance of federally enforceable state operating permits in lieu of Title V permits. Any permit issued under this subsection shall not be deemed a Title V permit.

(e) **MACT and Acid Rain Requirements.**

(1) If the administrator fails to promulgate a MACT standard for a category of sources consistent with the deadline pursuant to section 112(j)(2) of the Act, then the commissioner shall determine a MACT standard for such category of sources. The commissioner shall determine such MACT standard in the same manner as is required of the Administrator pursuant to section 112(d)(3) of the Act. In no event shall such a standard allow emissions of any hazardous air pollutant that would exceed the emissions allowed by an applicable standard pursuant to 40 CFR 63.

(2) Within three (3) years of the commissioner's determination of a MACT standard for a category of sources or upon notice from the commissioner to the owner or operator of the source, whichever is earlier, the owner or operator of a source with respect to which the commissioner has determined a MACT standard shall comply with such MACT standard.

(3) The owner or operator of a Title V source shall comply with the applicable provisions of 40 CFR 72 to 78, inclusive. If any such provision is stricter than a similar provision of an applicable permit issued pursuant to this section, the stricter provision shall prevail.

(f) **Timetable For Submitting An Application For A Title V Permit**.

(1) The owner or operator of a Title V source which is subject to this section shall not be required to apply for a Title V permit before the implementation date of this section. After such date, the owner or operator of such a source shall apply for a Title V permit within ninety (90) days of receipt of notice from the commissioner that such application is required or by the date specified by such notice, whichever is earlier. If such owner or operator does not receive such notice, such owner or operator shall apply for such permit within nine (9) months of the implementation date of this section.

(2) Except as provided in subdivision (3) of this subsection, the owner or operator of a Title V source shall apply for a Title V permit within ninety (90) days of receipt of notice from the commissioner that such application is required or twelve (12) months after becoming subject to this section, whichever is earlier.

(3) The owner or operator of a Title V source which is subject to this section solely pursuant to a standard in 40 CFR 60 or 61, shall apply for a Title V permit within ninety (90) days of receipt of notice from the commissioner that such application is required or as provided for by the administrator, whichever is earlier.

(4) The owner or operator of a new major stationary source or a major modification to an existing major stationary source to whom a Title V permit has not been issued and who is required to obtain a permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies shall apply for a Title V permit within ninety (90) days of receipt of notice from the commissioner that such Title V permit is required or within twelve (12) months of commencing operation under a permit issued pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies, whichever is earlier.

(5) Application for renewal of a Title V permit shall be made no later than twelve (12) months prior to the date of expiration of the Title V permit.

(6) Reserved.

(g) **Title V Permit Applications**.

(1) An application for a Title V permit shall be made on forms prescribed by the commissioner. The application shall contain the following:

(A) The legal name and business address of the applicant and of the applicant's agent for service of process and, if the applicant is not the owner of the subject source, the legal name and business address of such owner and of the owner's agent for service of process, and names and telephone numbers of the plant site manager and other individuals designated by the applicant to answer questions pertaining to such application;

(B) All information required by section 22a-3a-5 of the Regulations of Connecticut State Agencies, including an executive summary;

(C) A compliance plan pursuant to subsection (i) of this section meeting the requirements of 40 CFR 70.5(c)(8);

(D) A compliance certification pursuant to subsection (q)(2) of this section meeting the requirements of 40 CFR 70.5(c)(9);

(E) The information required by this subsection for each alternative operating scenario that the applicant has included in the Title V permit application;

(F) An identification and description of any alternative means of compliance with sections 22a-174-22 or 22a-174-32 of the Regulations of Connecticut State Agencies issued by order, permit or certification. In addition, a copy of such order, permit or certification shall be submitted with the application; and

(G) A certification pursuant to section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies.

(2) For the purpose of determining the applicability of this section pursuant to subsection (c) of this section, to impose any applicable requirement, or to determine compliance with any applicable requirement, an application for a Title V permit shall provide the following information about the subject Title V source:

(A) For each alternative operating scenario proposed, a description of the processes utilized, the standard industrial classification code, identification of each emission unit involved, as well as its throughput, hours of operation and capacity for the calendar year prior to the year of application or such other time period as the commissioner deems appropriate;

(B) For each regulated air pollutant emitted or proposed to be emitted by the subject source, the amount of potential and actual emissions from such source during the time period specified in subparagraph (A) of this subdivision; such emissions shall be expressed in tons per year and in such terms as are necessary to demonstrate compliance with the applicable standard reference test method, if any;

(C) The methodology used by the applicant to quantify emissions, in such terms as are necessary to determine compliance with the applicable standard reference test method, if any, the potential and actual emissions referred to in subparagraph (B) of this subdivision, and the emission rates in tons per year of each regulated air pollutant emitted or proposed to be emitted by the subject Title V source;

(D) The calculations used by the applicant to determine whether such source is a Title V source to which this section applies;

(E) A description of all air pollution control equipment used at the subject Title V source and a description of all monitoring equipment used at the subject Title V source to quantify emissions or to determine compliance with any applicable requirement;

(F) For each regulated air pollutant emitted or proposed to be emitted by the subject Title V source, a description of any operational limitations or work practices in effect at such source which affect emissions at the time the application is submitted or a description of the work practices to be implemented which will affect proposed emissions at a specified later date;

(G) For each emission unit, an identification of all applicable requirements, an identification and explanation of any exemptions the applicant proposes to exercise from otherwise applicable requirements, and identification of any applicable MACT source category as published in the Federal Register, in accordance with section 112(e)(3) of the Act, including any category which is subject to compliance dates occurring after the effective date of this section;

(H) Any test method to be used by the applicant for determining compliance with each applicable requirement identified pursuant to subparagraph (G) of this subdivision; and

(I) Any other information, required by each applicable requirement identified pursuant to subparagraph (G) of this subdivision.

(3) An application need not contain the information required under subdivisions (1) and (2) of this subsection on those items or activities specified in subparagraphs (A) and (B) of this subdivision.

(A) A laboratory hood used solely for the purpose of experimental study or teaching of any science or testing or analysis of drugs, chemicals, chemical compounds, or other substances, provided that the containers used for reactions, transfers, and other handling of substances under such laboratory hood are designed to be easily and safely manually manipulated by one person; or

(B) Any of the following items or activities which are not the principal function of the subject Title V source:

(i) office equipment, including but not limited to copiers, facsimile and communication equipment, and computer equipment,

(ii) grills, ovens, stoves, refrigerators, vending machines and other restaurant-style food preparation or storage equipment,

(iii) lavatory vents, hand dryers, and noncommercial clothes dryers, not including dry cleaning machinery,

(iv) garbage compactors and waste barrels,

(v) aerosol spray cans,

(vi) heating, air conditioning, and ventilation systems which do not remove air contaminants generated by or released from process or fuel burning equipment and which are separate from such equipment and which are not subject to 40 CFR part 82,

(vii) routine housekeeping activities such as painting buildings, roofing, and paving parking lots,

(viii) all clerical and janitorial activities,

(ix) maintenance activities such as: the mechanical repair of vehicles; the use of brazing, soldering and welding equipment, carpentry, electrical charging, grinding and polishing operations, maintenance shop vents; and miscellaneous non-production surface cleaning, preparation and painting operations, and

(x) space heaters which can reasonably be carried by one person by hand.

(4) Notwithstanding subdivision (3) of this subsection, an application shall include information regarding each activity or item set forth in subparagraphs (A) and (B) of subdivision (3) of this subsection, if necessary to determine whether a premises is a Title V source or to impose an applicable requirement. In addition, if the commissioner determines the emissions from any activity or items are needed to determine the applicability of this section or to impose any applicable requirement, the applicant shall list on the application such activities or items listed in subparagraphs (A) and (B) of subdivision (3) of this subsection.

(5) An application to renew or modify a Title V permit shall be made on forms prescribed by the commissioner and in accordance with section 22a-174-2a of the Regulations of Connecticut State Agencies. Such application shall include a description of any proposed changes, a proposed permit, any proposed monitoring procedures, any changes in actual emissions resulting from the proposed changes, and an identification of all regulatory, statutory, or otherwise applicable requirements that would become applicable as a result of such changes.

(h) **Title V Application Processing**

(1) An applicant for a Title V permit shall not be liable for failing to obtain such permit, unless:

(A) The commissioner notifies the applicant in writing within sixty (60) days of receipt of a sufficient and timely filed application that the application fails to meet the requirements in subsection (g) of this section or section 22a-3a-5(a)(1) of the Regulations of Connecticut State Agencies; or

(B) The commissioner notifies the applicant in writing subsequent to such sixty (60) days, while processing an application for a Title V permit that additional

information is necessary to take final action regarding such application, and the applicant fails to submit such information in writing within forty-five (45) days of such notification.

(2) An applicant for a Title V permit shall submit information to address any requirements that become applicable to the subject source and shall submit correct, complete and sufficient information upon the applicant's becoming aware of any incorrect, incomplete, and or insufficient submittal, during the pendency of the application, or any time thereafter, with an explanation for such deficiency and a certification pursuant to section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies.

(3) The owner or operator of a Title V source shall submit a copy of the application for a Title V permit, or for renewal or modification thereof, and of any compliance plan prepared pursuant to subsection (i) of this section, to the Administrator at the same time such owner or operator submits the application to the commissioner.

(i) **Compliance History, Plans with Schedules and Certifications**.

(1) Each application for a Title V permit shall include:

(A) A compliance history, if required by the commissioner, in accordance with section 22a-6m of the Connecticut General Statutes;

(B) A compliance plan, in accordance with 40 CFR 70.5(c)(8), that describes the compliance status of the Title V source with respect to all applicable requirements and including the following:

(i) With respect to applicable requirements with which the subject source is in compliance at the time the application is submitted, the applicant shall submit with the application a statement that the owner and operator of such source will continue to comply with such requirements,

(ii) With respect to applicable requirements which will not take effect until after the reasonably anticipated issuance date of the Title V permit sought by the applicant, the applicant shall submit a statement that the owner and operator of such source will comply and continue to comply with such requirements once they are applicable,

(iii) With respect to applicable requirements for which the source is not in compliance at the time of permit issuance, a description of how the owner and operator of such source will achieve compliance with such requirements in accordance with the compliance plan, and

(iv) For each applicable requirement identified in accordance with subparagraphs (B)(ii) and (B)(iii) of this subdivision, a compliance schedule, which shall be at least as stringent as any requirement contained in any final judgment or decree or any administrative order to which the applicant is subject, specifying the dates by which measures will be taken to bring the Title V source into compliance with the applicable requirement;

(C) A compliance certification, which meets the requirements of subsection (q) of this section and 40 CFR 70.5(c)(9), that shall require:

(i) The submission of certified progress reports in accordance with subdivision (q)(1) of this section, and

(ii) The submission of compliance certifications in accordance with subdivision (q)(2) of this section.

(2) The submittal of a compliance schedule pursuant to subdivision (1)(B)(iv) of this subsection shall not preclude the commissioner from imposing a more stringent compliance schedule or taking enforcement action against the owner or operator of the Title V source for such noncompliance.

(3) The compliance plan content required by this subsection shall be included in the acid rain portion of a compliance plan for a Title V source that is also subject to any provision of 40 CFR 72 to 78, inclusive, except as specifically superseded therein.

(j) **Standards for Issuing and Renewing Title V permits**.

(1) Except with respect to an application for a Title V permit for a source subject to a deadline pursuant to 40 CFR 72 to 78, inclusive, within eighteen (18) months of receiving a Title V permit application, and within twelve (12) months of receiving an application to modify or renew a Title V permit, the commissioner shall make a decision to grant or deny such application. The commissioner shall submit a copy of such decision to the Administrator. Failure of the commissioner to act within such period shall not entitle the applicant to permit issuance, modification or renewal of any Title V permit. The commissioner shall not issue a Title V permit, permit modification, or permit renewal to the owner or operator of a Title V source unless the commissioner determines that the subject source is in compliance or will be in compliance with all relevant and applicable requirements and the permit or permit modification contains the following conditions:

(A) An expiration date no later than five (5) years after the date the commissioner issues such permit;

(B) A statement that all of the terms and conditions of the permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with this section;

(C) A statement that the permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of such permit, and any other applicable provisions of law. In addition, the permit shall state that any noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application;

(D) A statement of the legal authority and technical origin for each permit term or condition, including any difference in form from the applicable requirement upon which the term or condition is based;

(E) A statement identifying which terms or conditions of the permit are federally enforceable and which are enforceable only by the commissioner, and explaining that the federally enforceable provisions, and those not otherwise identified as enforceable only by the commissioner, are enforceable by the Administrator and the citizens under the Act;

(F) If the subject source is required by an applicable requirement to limit emissions of a regulated air pollutant, the permit imposes such limits, provided that, where allowed by such applicable requirement:

(i) such limits are no less than 1,000 pounds per year or any quantity prescribed by 40 CFR 63, whichever is more stringent, for each emission unit, for any hazardous air pollutant, and

(ii) for all other regulated air pollutants such limits are no less than one (1) ton per pollutant per year for each emission unit;

(G) A statement that the permit shall not be deemed to:

(i) preclude the creation or use of emission reduction credits or allowances or the trading thereof in accordance with subparagraphs (I) and (P) of this subdivision,

(ii) authorize emissions of an air pollutant so as to exceed levels that are prohibited pursuant to 40 CFR 72,

(iii) authorize the use of allowances pursuant to 40 CFR 72 to 78, inclusive, as a defense to noncompliance with any applicable requirement, or

(iv) impose limits on emissions from items or activities specified in subparagraphs (A) and (B) of subdivision (g)(3) of this section unless imposition of such limits is required by an applicable requirement;

(H) A statement of all limitations, requirements, and standards that apply to each emission unit. Such statement shall include:

(i) those operational limitations, requirements and standards necessary to assure compliance with all applicable requirements, including 40 CFR 63, and

(ii) any applicable requirement of 40 CFR Part 72 to 78, inclusive;

(I) A statement of all alternative emission limits or means of compliance allowed by the commissioner. Such alternative emission limits or means shall be quantified, and legally enforceable, and the method for demonstrating compliance with such limits shall be based upon replicable procedures. The permit may contain an emissions limitation facilitating intra-premises emission reduction trades allowed by subsection (r) of this section and any other applicable requirements;

(J) A statement of all terms and conditions applicable to any allowable alternative operating scenario, including a requirement that each such alternative operating scenario shall meet all applicable requirements and not result in adverse effects on public health or the environment;

(K) A requirement that the permittee monitor regulated air pollutants emitted by the subject source to determine compliance with applicable emission limitations and standards. Unless otherwise required by an applicable requirement, such monitoring shall cover items and activities other than those listed in subdivision (g)(3) of this section and other than emissions below the levels of emissions prescribed in subparagraph (1)(F) of this subsection. Such monitoring requirements shall consist of one or more of the following:

(i) all emissions monitoring and analysis procedures or test methods required by applicable requirements, including any procedures and methods required pursuant to 40 CFR Part 70, and

(ii) where an applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring, periodic monitoring or recordkeeping sufficient to yield reliable data during the relevant time period which data is representative of the emissions or parameters required by the permit to be monitored. Recordkeeping shall be sufficient to meet the requirements of this subsection if so determined by the commissioner;

(L) All requirements for emissions monitoring analysis procedures and test methods. Such requirements shall specify to the extent applicable: what monitoring equipment shall be installed and used or the monitoring method that shall be used; maintenance procedures for the monitoring equipment; and units of measurement, averaging periods, and other measurements conventions, consistent with applicable requirements.

(M) A statement that the commissioner may, for the purpose of determining compliance with the permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under the permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with the permit;

(N) All recordkeeping requirements and all reporting and notification requirements pursuant to subsections (o), (p) and (q) of this section including a requirement that the permittee shall report in writing to the commissioner any deviation in accordance with subsection (p) of this section;

(O) The conditions under which the permit will be reopened prior to the expiration of the permit as identified in 40 CFR 70.7(f)(1)(i) to (iv);

(P) Any terms and conditions necessary to enable the permittee to create, use, and trade emissions reduction credits or allowances in accordance with sections 22a-174f and 22a-174i of the Connecticut General Statutes, any regulations adopted thereunder, and with the provisions of 40 CFR 51 subpart U. Such terms and conditions, to the extent that the applicable requirements provide for trading without the commissioner's or Administrator's case-by-case approval of each emission trade, shall meet all the applicable requirements;

(Q) A schedule for monitoring, recordkeeping, and reporting with respect to the compliance plan submitted in accordance with subsection (i) of this section;

(R) A severability clause to ensure the continued validity of provisions remaining in the Title V permit if other provisions are legally invalidated;

(S) Any term or condition of any other permit, or registration thereunder, issued to the permittee pursuant to section 22a-174 of the Connecticut General Statutes or any term or condition of any order issued by the commissioner prior to issuance of the Title V permit, modification or renewal thereof;

(T) A statement that it shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit;

(U) A statement that the permit may be modified, revoked, reopened, reissued, or suspended by the Administrator in accordance with 40 CFR 70.7(f), 40 CFR 70.7(g) and 40 CFR 70,6(a)(6)(iii), and that it may be modified, revoked or suspended by the commissioner in accordance with sections 4-182 and 22a-174c of the Connecticut General Statutes, or section 22a-3a-5(d) of the Regulations of Connecticut State Agencies;

(V) A statement that the filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the permittee's obligation to comply with the permit;

(W) A statement that the permit does not convey any property rights or any exclusive privileges;

(X) A requirement that the permittee submit additional information in writing, at the commissioner's request, within thirty (30) days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending the permit or to determine compliance with the permit;

(Y) The conditions under which the permit will be modified and references to the authority for permit modification; and

(Z) A statement that the owner or operator has paid, and will continue to pay, to the department all fees as required by section 22a-174-26 of the Regulations of Connecticut State Agencies, including those fees due during the term of such permit.

(2) The commissioner shall not issue a Title V permit unless all the requirements of subsections (*l*) and (m) of this section have been complied with.

(3) The commissioner shall make a summary of the legal authority and technical origin of each proposed permit term and condition identified under subdivision (1)(D) of this subsection. The summary shall provide the legal and factual basis for each proposed permit term or condition.

(4) The commissioner shall send to the administrator, and any individual who so requests it in writing, a copy of the summary required by subdivision (3) of this subsection.

(5) The commissioner shall not issue a general permit pursuant to section 22a-174(*l*) of the Connecticut General Statutes with respect to a stationary source which is subject to any provision of 40 CFR 72 to 78, inclusive.

(k) **Title V Permit Shield**

(1) Except as otherwise provided, the commissioner may state in a new Title V permit or modified Title V permit pursuant to section 22a-174-2a(d)(3) or (4) of the Regulations of Connecticut State Agencies, that compliance with the terms and conditions of such permit shall be deemed compliance with a specifically identified applicable requirement, provided that:

(A) Such applicable requirement is stated in such permit application and permit and the legal authority for such requirement is specifically identified in the permit; or

(B) Such requirement is specifically identified in the permit and determined by the commissioner not to be applicable to such Title V source, and the permit includes such determination or a concise summary thereof.

(2) Any Title V permit that does not expressly state that compliance with the conditions of such permit shall be deemed compliance with a specifically identified applicable requirement shall be presumed not to provide a permit shield as provided for by subdivision (1) of this subsection.

(3) Notwithstanding subdivision (1) of this subsection, the Title V permit shall comply with the provisions of 40 CFR 70.6(f)(3)(i) to (iv), inclusive.

(4) The permit shield in subdivision (1) of this subsection shall not apply to:

(A) A modification of A Title V permit pursuant to section 22a-174-2a(e) of the Regulations of Connecticut State Agencies;

(B) A revision of a Title V permit pursuant to section 22a-174-2a(f) of the Regulations of Connecticut State Agencies, including administrative admendments implemented pursuant to section 22a-174-2a(f)(2)(F) of the Regulations of Connecticut State Agencies; or

(C) Off-permit changes or operational flexibility pursuant to subsection (r)(2) of this section.

(*l*) **Public Notice.** The requirements of section 22a-174-2a(b) and 22a-174-2a(c) of the Regulations of Connecticut State Agencies apply to an application for a Title V permit and the owner or operator of a Title V source.

(m) **Public Hearings.** The requirements of section 22a-174-2a(c) of the Regulations of Connecticut State Agencies apply to an application for a Title V permit and the owner or operator of a Title V source.

(n) **Administrator's Review of Proposed Permits.**

(1) The administrator is authorized by the Act to review the commissioner's proposed Title V permits within forty-five (45) days of receipt.

(2) The commissioner shall comply with the applicable provisions of 40 CFR 70.8.

(3) The commissioner shall have ninety (90) days from receipt of an objection from the administrator to resolve such objection.

(4) Pursuant to the Act, if the Administrator does not object in writing in accordance with 40 CFR 70.8(c), any person may petition the Administrator to object to a proposed permit in accordance with 40 CFR 70.8(d).

(5) If the commissioner does not, within ninety (90) days after receipt of an objection raised by the administrator pursuant to 40 CFR 70.8(c), submit a revised proposed permit to the administrator in response to the objection, the administrator will issue or deny the Title V permit pursuant to 40 CFR 71.

(6) The commissioner shall not issue a Title V permit until any objection raised by the administrator pursuant to 40 CFR 70.8(d), is resolved. If the commissioner

has issued a Title V permit prior to receipt of an objection from the administrator pursuant to 40 CFR 70.8(d), the administrator will modify, terminate or revoke such permit in accordance with 40 CFR 70.7(g)(4) or (5)(i) and (ii).

(o) **Title V Monitoring Reports and Making and Keeping Records.**

(1) **Monitoring reports.** A permittee required to perform monitoring pursuant to a Title V permit shall submit to the commissioner, on forms prescribed by the commissioner, written monitoring reports on March 1 and September 1 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

(A) Each deviation caused by upset or control equipment deficiencies;

(B) Each deviation of a permit requirement that has been monitored by the monitoring systems required under the Title V permit, which has occurred since the date of the last monitoring report; and

(C) Each deviation caused by a failure of the monitoring system to provide reliable data.

(2) Making and Keeping Records. Unless otherwise required by the subject permit, the permittee shall make and keep records of all required monitoring data and supporting information for at least five (5) years from the date such data and information were obtained. The permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

(A) The type of monitoring or records used to obtain such data, including record keeping;

(B) The date, place, and time of sampling or measurement;

(C) The name of the individual who performed the sampling or the measurement and the name of such individual's employer;

(D) The date(s) on which analyses of such samples or measurements were performed;

(E) The name and address of the entity that performed the analyses;

(F) The analytical techniques or methods used for such analyses;

(G) The results of such analyses;

(H) The operating conditions at the subject source at the time of such sampling or measurement; and

(I) All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

(3) Contemporaneously with making a change from one alternative operating scenario to another pursuant to a Title V permit, a permittee shall maintain a record at the site of the subject source including an identification or description of the current alternative operating scenario and the date on which the permittee changed from one alternative operating scenario to another.

(4) Any report submitted to the commissioner pursuant to this subsection shall be certified in accordance with section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies.

(p) **Notifications of Deviations**

(1) A permittee shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify

the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures, as follows:

(A) For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and

(B) For any other regulated air pollutant, no later than ten (10) days after such deviation commenced;

(2) An affirmative defense to an administrative or civil action by the state with respect to a violation of a technology-based emission limitation may be made by the permittee pursuant to 40 CFR 70.6(g), provided that the permittee meets all applicable provisions of 40 CFR 70.6(g)(1) to (5), inclusive.

(3) The permittee shall certify any written notification submitted to the commissioner pursuant to this subsection in accordance with section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies.

(q) **Title V Progress Reports and Compliance Certifications.**

(1) **Progress reports.** A permittee shall, on March 1 and September 1 of each year, or on a more frequent schedule if specified in such permit, submit to the commissioner a progress report on forms prescribed by the commissioner, and certified in accordance with section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies. Such report shall describe the permittee's progress in achieving compliance under the compliance plan schedule contained in the permit. Such report shall:

(A) Identify those obligations under the compliance plan schedule in the permit which the permittee has met, and the dates on which they were met; and

(B) Identify those obligations under the compliance plan schedule in the permit which the permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the permittee expects to meet them.

(2) **Compliance certification.** A permittee shall, on March 1 of each year, or on a more frequent schedule if specified in such permit, submit to the commissioner a written compliance certification certified in accordance with section 22a-174-2a(a)(5) of the Regulations of Connecticut State Agencies and which includes the information identified in Title 40 CFR 70.6(c)(5)(iii)(A) to (C), inclusive.

(3) Any progress report prepared and submitted pursuant to subdivision (1) of this subsection, or compliance certification prepared and submitted pursuant to subdivision (2) of this subsection shall be simultaneously submitted by the permittee to the Administrator.

(r) **Title V Permit Modifications, Revisions, Operational Flexibility and Off Permit Changes.**

(1) Non-minor permit modifications, minor permit modifications or revisions to Title V permits shall be made in accordance with section 22a-174-2a(d), (e) or (f) of the Regulations of Connecticut State Agencies.

(2) Operational Flexibility and Off-Permit Changes.

(A) Except as provided in subparagraph (B) of this subdivision, a permittee may engage in any action allowed by the administrator in accordance with 40 CFR 70.4(b)(12)(i) to (iii)(B) inclusive, and 40 CFR 70.4(b)(14)(i) to (iv), inclusive without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision.

(B) Any action authorized pursuant to subparagraph (A) of this subdivision to (v), of this subdivision provided such action does not:

(i) constitute a modification under 40 CFR 60, 61 or 63,

(ii) exceed emissions allowable under the subject permit,

(iii) constitute an action which would subject the permittee to any standard or other requirement purusant to 40 CFR 72 to 78, inclusive, or

(iv) constitute a non-minor permit modification pursuant to section 22a-174-2a(d)(4) of the Regulations of Connecticut State Agencies.

(s) **Title V permit reopenings.** The commissioner shall comply with the applicable provisions of 40 CFR 70.7(f) and (g).

(Effective September 20, 1995; amended March 15, 2002, April 4, 2006, June 12, 2009, April 6, 2010, January 28, 2011)

Secs. 22a-174-34—22a-174-35. Reserved

Sec. 22a-174-36. Low emission vehicles

(a) **Definitions.** For the purposes of this section:

''Air contaminant emission control system'' means the equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine, or a system or engine modification on a motor vehicle or motor vehicle engine which causes a reduction of air contaminants emitted from the motor vehicle or motor vehicle engine, including but not limited to exhaust control systems, fuel evaporation control systems, and crankcase ventilating systems.

''CARB'' means the California Air Resources Board.

''Certified'' means the finding by EPA or CARB that a motor vehicle, motor vehicle engine, or motor vehicle engine family, or air contaminant emission control system has satisfied the criteria adopted by EPA or CARB for the control of specified air contaminants from motor vehicles.

''Department'' means the Department of Environmental Protection.

''Dual-fuel'' means a motor vehicle that is engineered and designed to be capable of operating on a petroleum fuel and on another fuel which is stored separately on-board the vehicle.

''Emergency vehicle'' means any publicly owned vehicle operated by a peace officer in performance of his or her duties, any authorized vehicle used for fighting fires or responding to emergency fire calls, any publicly owned authorized vehicle used by emergency medical technicians or paramedics, or used for towing or servicing other vehicles, or repairing damaged lighting or electrical equipment, or an ambulance.

''Emission control label'' means the permanent stickers required by CARB and affixed to all 1998 and subsequent model year passenger cars and light duty trucks, certified for sale in California.

''EPA'' means the United States Environmental Protection Agency.

''Executive Officer'' means the Executive Officer of CARB.

''Fleet average emissions'' means a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases from all vehicles which are subject to this section, sold in the State of Connecticut in any model year.

''Fuel-flexible'' means a methanol-fueled motor vehicle that is engineered and designed to be operated using any gasoline-methanol fuel mixture or blend.

''Hybrid electric vehicle'' or ''HEV'' means a motor vehicle which allows power to be delivered to the driver wheels solely by a battery powered electric motor but

which also incorporates the use of a combustion engine to provide power to the battery, or any vehicle which allows power to be delivered to the driver wheels by either a combustion engine and/or by a battery powered electric motor.

''LDT'' means light duty truck.

''Light duty truck'' means any motor vehicle having a gross vehicle weight rating of 6000 pounds or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

''Loaded vehicle weight'' means vehicle curb weight plus 300 pounds.

''LVW'' means loaded vehicle weight.

''Model year'' means a motor vehicle manufacturer's annual production period which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year. In case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

''New vehicle'' means any passenger car or light duty truck with 7,500 miles or fewer on its odometer.

''Passenger car'' means any motor vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.

''PC'' means passenger car.

''Vehicle'' means a motor vehicle.

''Zero-emission vehicle'' or (ZEV) means any vehicle which is certified by the Executive Officer to produce zero emissions of any criteria pollutants under any and all possible operational modes and conditions. Incorporation of a fuel fired heater shall not preclude a vehicle from being certified as a ZEV provided the fuel fired heater cannot be operated at ambient temperatures above 40 degrees Fahrenheit and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.

(b) **Applicability.** This section shall apply to all 1998 and subsequent model year passenger cars and light duty trucks sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received in the State of Connecticut except that this section shall not apply to those vehicles listed in subsection (d).

(c) **Prohibitions.**

(1) No person shall sell, import, deliver, purchase, lease, rent, acquire or receive a new vehicle in the State of Connecticut which is subject to this section unless such new vehicle:

(A) complies with the requirements of subsection (e);

(B) is approved by CARB for sale in the State of California; and

(C) has a valid Emission Control Label.

(d) **Exemptions.** The following vehicles shall not be subject to this section:

(1) A vehicle transferred by inheritance;

(2) A vehicle transferred by decree of divorce, dissolution or legal separation entered by a court of competent jurisdiction;

(3) A vehicle purchased by a nonresident prior to establishing residency in the State of Connecticut;

(4) A vehicle sold for the purpose of being wrecked or dismantled;

(5) A vehicle sold directly from one dealer to another dealer;

(6) A vehicle sold for registration out of state;

(7) A vehicle designed exclusively for off-highway use;

(8) A vehicle which has been certified to standards promulgated pursuant to the authority contained in 42 U.S.C. 7521 and which is in the possession of a rental

agency in Connecticut and is next rented with a final destination outside of Connecticut; or

(9) A vehicle which is an emergency vehicle.

(e) **Emission Standards.**

(1) Vehicle Emission Standards.

(A) The exhaust emissions from new 1998 and subsequent model-year passenger cars and light-duty trucks which are subject to this section shall not exceed those set forth in Table 36-1:

Table 36-1
1998 and Subsequent Model-Year Passenger Car and Light-Duty Truck Exhaust Emissions Standards [3 4 5 7]
(grams per mile)

Vehicle Type	*Loaded Vehicle Weight (lbs)*	*Durability Vehicle Basis (mi)*	*Non-Methane Hydrocarbons* [1]	*Carbon Monoxide*	*Oxides of Nitrogen*[2]
PC	All	50,000	0.25	3.4	0.4
PC	All	100,000	0.31	4.2	0.6[6]
Diesel PC	All	100,000	0.31	4.2	1.0
(Option 2)	0-3750	50,000	0.25	3.4	0.4
LDT					
LDT	0-3750	100,000	0.31	4.2	0.6[6]
Diesel	0-3750	100,000	0.31	4.2	1.0
LDT	3751-5750	50,000	0.32	4.4	0.7
(Option 2)					
LDT					
LDT	3751-5750	100,000	0.40	5.5	0.97[6]
Diesel	3751-5750	100,000	0.40	5.5	1.5
LDT					
(Option 1)					

[1] For methanol- or ethanol-fueled vehicles certifying to these standards, including fuel-flexible vehicles when certifying on methanol or ethanol, ''Non-Methane Hydrocarbons'' shall mean ''Organic Material Non-Methane Hydrocarbon Equivalent'' (or ''OMNMHCE'').

[2] The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall be not greater than 1.33 times the applicable passenger car standards and 2.00 times the applicable light-duty truck standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

[3] Diesel passenger cars and light-duty trucks certifying to these standards, are subject to a particulate exhaust emission standard of 0.08 g/mi, determined on a 50,000 mile durability vehicle basis.

[4] For all vehicles, except those certifying to optional diesel standards, in-use compliance with the exhaust emission standards shall be limited to vehicles with less than 75,000 miles.

[5] All passenger cars and light-duty trucks, except those diesel vehicles certifying to optional standards, are subject to non-methane hydrocarbon, carbon monoxide, and oxides of nitrogen standards determined on a 50,000 mile durability basis and non-methane hydrocarbon and carbon monoxide standards determined on an 100,000 mile durability basis.

[6] 100,000 mile NOx standards are applicable for 1998 and subsequent model-year vehicles.

[7] Each manufacturer shall also comply with the requirements specified in section 1960.1 (g) (2).

(B) The exhaust emissions from new 1998 and subsequent model-year light-duty transitional low-emission vehicles, low-emission vehicles, and ultra-low-emission vehicles which are subject to this section shall not exceed those set forth in Table 36-2:

Table 36-2
Exhaust Emission Standards for Transitional Low-Emission Vehicles, Low Emission Vehicles and Ultra-Low-Emission Vehicles in Passenger Car and Light-Duty Truck Vehicle Classes [5 6 7 8 9]
(grams per mile (or ''g/mi''))

Vehicle Type	*Loaded Vehicle Weight (lbs)*	*Durability Vehicle Basis (mi)*	*Vehicle Emission Category* [1]	*Non-Methane Organic Gases* [2 3]	*Carbon Monoxide*	*Oxides of Nitrogen* [4]
PC and	All	50,000	TLEV	0.125	3.4	0.4
LDT	0-3750		LEV	0.075 (0.100)	3.4 (3.4)	0.2 (0.3)
			ULEV	0.040 (0.058)	1.7 (2.6)	0.2 (0.3)
		100,000	TLEV	0.156	4.2	0.6
			LEV	0.090	4.2	0.3
			ULEV	0.055	2.1	0.3
LDT	3751-5750	50,000	TLEV	0.160	4.4	0.7
			LEV	0.100 (0.128)	4.4 (4.4)	0.4 (0.5)
			ULEV	0.050 (0.075)	2.2 (3.3)	0.4 (0.5)
		100,000	TLEV	0.200	5.5	0.9
			LEV	0.130	5.5	0.5
			ULEV	0.070	2.8	0.5

[1] ''TLEV'' means transitional low-emission vehicle.
''LEV'' means low-emission vehicle.
''ULEV'' means ultra-low-emissions vehicles.

[2] ''Non-Methane Organic Gases'' (or ''NMOG'') shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions. To demonstrate compliance with an NMOG standard, NMOG emissions shall be measured in accordance with the ''California Non-Methane Organic Gas Test Procedures'' as adopted July 12, 1991 and last amended September 22, 1993, which is incorporated herein by reference. For TLEVs, LEVs, and ULEVs certified to operate exclusively on any fuel other than conventional gasoline, and for fuel-flexible and dual-fuel TLEVs, LEVs, and ULEVs when certifying on a fuel other than gasoline, manufacturers shall multiply NMOG exhaust certification levels by the applicable reactivity adjustment factor set forth in section 13 of the ''California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles'' as incorporated by reference in section 1960.1 (k), Title 13, California Code of Regulations, or established by the Executive Officer pursuant to Appendix VIII of the foregoing test procedures. In addition, natural gas vehicles certifying to TLEV, LEV, or ULEV standards shall calculate a reactivity-adjusted methane exhaust emission value by multiplying the methane exhaust certification level by the applicable methane reactivity adjustment factor set forth in section 13 of the above referenced test procedures. The product of the NMOG exhaust certification levels and the reactivity adjustment factor shall be compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance. For natural gas vehicles, the reactivity-adjusted NMOG value shall be added to the reactivity-adjusted methane value and then compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance.

(a) Each manufacturer shall certify PCs or LDTs to meet the exhaust mass emission standards for TLEVs, LEVs, ULEVs, or the exhaust emission standards of sections 1960.1 (e) (1), 1960.1 (f) (1), or 1960.1 (f) (2), Title 13, California Code of Regulations, or as Zero-Emission Vehicles such that the manufacturer's fleet average NMOG values for California-certified PCs and LDTs from 0-3750 lbs. ''Loaded Vehicle Weight'' (or ''LVW''), and LDTs from 3751-5750 lbs. LVW produced and delivered for sale in California are less than or equal to the requirement for the corresponding Model Year, Vehicle Type, and LVW Class in section 1960.1 (g) (2), Title 13, California Code of Regulations.

[3] Fuel-flexible and dual-fuel PCs and LDTs from 0-5750 lbs. LVW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on any available fuel other than gasoline, and gasoline.

(a) For TLEVs, LEVs, and ULEVs, when certifying for operation on a fuel other than gasoline, manufacturers shall multiply exhaust NMOG certification levels by the applicable reactivity adjustment factor. In addition to multiplying the exhaust NMOG certification levels by the applicable reactivity adjustment factor, natural gas vehicles shall multiply the exhaust methane certification level by the applicable methane reactivity adjustment factor and add that value to the reactivity-adjusted NMOG value. The exhaust NMOG certification levels for fuel-flexible or dual-flexible vehicles when certifying on gasoline shall not be multiplied by a reactivity adjustment factor.

(b) For PCs and LDTs from 0-3750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:

(i) For TLEVs, 0.25 g/mi and 0.31 g/mi for 50,000 and 100,000 miles, respectively.

(ii) For LEVs, 0.125 g/mi and 0.156 g/mi for 50,000 and 100,000 miles, respectively.

(iii) For ULEVs, 0.075 g/mi and 0.090 g/mi for 50,000 and 100,000 miles, respectively.

(c) For LDTs from 3751-5750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:

(i) For TLEVs, 0.32 g/mi and 0.40 g/mi for 50,000 and 100,000 miles, respectively.

(ii) For LEVs, 0.160 g/mi and 0.200 g/mi for 50,000 and 100,000 miles, respectively.

(iii) For ULEVs, 0.100 g/mi and 0.130 g/mi for 50,000 and 100,000 miles, respectively.

[4] The maximum projected emissions of ''Oxides of Nitrogen'' (or ''NOx'') measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B) shall be not greater than 1.33 times the applicable light-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

[5] The standards in parentheses are intermediate in-use compliance standards for 50,000 miles. For PCs and LDTs from 0-5750 lbs. LVW, including fuel-flexible and dual-fuel vehicles when operating on any available fuel other than gasoline, intermediate in-use compliance standards shall apply to LEVs and ULEVs for the 1998 model-year. In-use compliance with standards beyond 50,000 miles shall be waived for the 1998 model year for LEVs and ULEVs.

(a) For TLEVs, LEVs, and ULEVs designed to operate on any fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on any fuel other than gasoline, exhaust NMOG mass emission results shall be multiplied by the applicable reactivity adjustment factor to determine compliance with intermediate in-use compliance standards for NMOG. In addition to multiplying the exhaust NMOG emission results by the applicable reactivity adjustment factor, natural gas vehicles shall multiply the exhaust methane emission results by the applicable methane reactivity adjustment factor and add that value to the reactivity-adjusted NMOG value. Exhaust NMOG mass emissions from fuel-flexible or dual-fuel vehicles when operating on gasoline shall not be multiplied by a reactivity adjustment factor.

(b) For fuel-flexible and dual-fuel PCs and LDTs from 0-3750 lbs. LVW intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.188 g/mi and 0.100 g/mi for LEVs and ULEVs, respectively.

(c) For fuel-flexible and dual-fuel PCs and LDTs from 3751-5750 lbs. LVW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.238 g/mi and 0.128 g/mi for LEVs and ULEVs, respectively.

[6] Manufacturers of diesel vehicles shall also certify to particulate standards at 100,000 miles. For all PCs and LDTs from 0-5750 lbs. LVW, the particulate standard is 0.08 g/mi, 0.08 g/mi, and 0.04 g/mi for TLEVs, LEVs, and ULEVs, respectively.

[7] Manufacturers shall demonstrate compliance with the above standards for NMOG, CO, and NOx at 50 degrees F according to the procedure specified in section 11K of the ''California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles'' as incorporated by reference in section 1960.1 (k), Title 13, California Code of Regulations. Hybrid electric, natural gas, and diesel-fueled vehicles shall be exempt from 50 degrees F test requirements.

[8] In-use compliance testing shall be limited to vehicles with fewer than 75,000 miles.

[9] Deterioration factors for hybrid electric vehicles shall be based on the emissions and mileage accumulation of the auxiliary power unit. For certification purposes only, Type A hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors), and demonstrating compliance with 100,000 mile emission standards shall not be required. For certification purposes only, Type B hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 75,000 mile deterioration factors). For certification purposes only, Type C hybrid vehicles shall demonstrate

compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 100,000 mile deterioration factors).

(2) Fleet Average Emission Standards.

The fleet average non-methane organic gas exhaust emission values from a manufacturer's sales of passenger cars and light-duty trucks which are subject to this section shall not exceed those set forth in Table 36-3:

Table 36-3

Fleet Average Non-Methane Organic Gas Exhaust Emission Requirements for Light-Duty Vehicle Weight Classes [6 7 8] (grams per mile (or ''g/mi''))

Vehicle Type	*Loaded Vehicle Weight (lbs.)*	*Durability Vehicle Basis (mi)*[6]	*Model Year*	*Fleet Average Non-Methane Organic Gases* [1 2 3 4 5]
PC and LDT	ALL 0-3750	50,000	1998	0.157
			1999	0.113
			2000	0.073
			2001	0.070
			2002	0.068
			2003 & subsequent	0.062
LDT	3751-5750	50,000	1998	0.205
			1999	0.150
			2000	0.099
			2001	0.098
			2002	0.095
			2003 & subsequent	0.093

[1] ''Non-Methane Organic Gases'' (or ''NMOG'') shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

[2] For the purpose of calculating fleet average NMOG values, a manufacturer may adjust the certification levels of hybrid electric vehicles (or ''HEVs'') based on the range of the HEV without the use of the engine. For the purpose of calculating the adjusted NMOG emissions, the following definitions shall apply:

''Type A HEV'' shall mean an HEV which achieves a minimum range of 60 miles over the All-Electric Range Test as defined in ''California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles'' as incorporated by reference in section 1960.1 (k), Title 13, California Code of Regulations.

''Type B HEV'' shall mean an HEV which achieves a range of 40–59 miles over the All-Electric Range Test as defined in ''California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles'' as incorporated by reference in section 1960.1 (k), Title 13, California Code of Regulations.

''Type C HEV'' shall mean an HEV which achieves a range of 0–39 miles over the All-Electric Range Test and all other HEVs excluding ''Type A'' and ''Type B'' HEVs as defined in ''California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles'' as incorporated by reference in section 1960.1 (k), Title 13, California Code of Regulations.

(a) For the purpose of calculating fleet average NMOG values, vehicles which have no tailpipe emissions but use fuel-fired heaters and which are not certified as ZEVs shall be treated as ''Type A HEV ULEVs.''

[3] Each manufacturer's fleet average NMOG value for the total number of PCs and LDTs from 0-3750 lbs. ''Loaded Vehicle Weight'' (or ''LVW'') produced and delivered for sale in Connecticut shall be calculated in units of g/mi NMOG according to the following equation, where the term ''Produced'' means produced and delivered for sale in Connecticut as: {[(No. of Vehicles Certified to the Exhaust Emission Standards section 1960.1 (e) (1) and Produced) × (0.39)] + [No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (f) (1) and Produced × (0.25)] + [(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (f) (2) and Produced) × (0.25)] + [(No. of Transitional

Low-Emission Vehicles (or ''TLEVs'') excluding HEVs and Produced) × (0.125)] + [(No. of Low-Emission Vehicles (or ''LEVs'') excluding HEVs and Produced) × (0.075)] + [(No. of Ultra-Low-Emission Vehicles (or ''ULEVs'') excluding HEVs and Produced) × (0.040)] + (HEV contribution factor)}/(Total No. of Vehicles Produced, Including Zero-Emission Vehicles and HEVs):

(a) ''HEV contribution factor'' shall mean the NMOG emission contribution of HEVs to the fleet average NMOG value. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term ''Produced'' means produced and delivered for sale in Connecticut:

HEV contribution factor = {[No. of ''Type A HEV'' TLEVs Produced] × (0.100) + [No. of ''Type B HEV'' TLEVs Produced] × (0.113) + [No. of ''Type C HEV'' TLEVs Produced] × (0.125)} + {No. of ''Type A HEV'' LEVs Produced] × (0.057) + [No. of ''Type B HEV'' LEVs Produced] × (0.066) + [No. of ''Type C HEV'' LEVs Produced] × (0.075)} + {[No. of ''Type A HEV'' ULEVs Produced] × (0.020) + [No. of ''Type B HEV'' ULEVs Produced] × (0.030) + [No. of ''Type C HEV'' ULEVs Produced] × (0.040)}.

(b) ''Zero-Emission Vehicles'' (or ''ZEVs'') classified as LDTs 3751-5750 lbs. LVW which have been counted toward the ZEV requirements for PCs and LDTs 0-3750 lbs. LVW as specified in note (8) shall be included in the equation of note (3).

(c) Beginning with the 1996 model year, manufacturers that produce and deliver for sale in Connecticut PCs and LDTs 0-3750 lbs. LVW that are certified to federal Tier I exhaust emission standards in 40 CFR 86.094-8 and 86.094-9 shall add the following terms to the numerator of the fleet average NMOG equation in note (3) and calculate their fleet average NMOG values accordingly: [(No. of Vehicles Certified to federal Tier I exhaust emission standards and Produced) × (0.25)].

[4] Manufacturers that certify LDTs from 3751-5750 lbs. LVW, shall calculate a fleet average NMOG value in units of g/mi NMOG according to the following equation, where the term ''Produced'' means produced and delivered for sale in Connecticut: {[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (e) (1), and Produced × (0.50)] + [(No. of Vehicles Certified to the Phase-In Exhaust Emission Standards in section 1960.1 (f) (1), and Produced × (0.32)] + [(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (f) (2), and Produced × (0.32)] + [(No. of TLEVs Produced excluding HEVs) × (0.160)] + [(No. of LEVs Produced excluding HEVs) × (0.100)] + [(No. of ULEVs Produced excluding HEVs) × (0.050)] + (HEV contribution factor)}/(Total No. of Vehicles Produced, Including ZEVs and HEVs).

(a) ''HEV contribution factor'' shall mean the NMOG emission contribution of HEVs to the fleet average NMOG. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term ''Produced'' means produced and delivered for sale in Connecticut:

HEV contribution factor = {[No. of ''Type A HEV'' TLEVs Produced] × (0.130) + [No. of ''Type B HEV'' TLEVs Produced] × (0.145) + [No. of ''Type C HEV'' TLEVs Produced] × (0.160)} + {[No. of ''Type A HEV'' LEVs Produced] × (0.075) + [No. of ''Type B HEV'' LEVs Produced] × (0.087) + [No. of ''Type C HEV'' LEVs Produced] × (0.100)} + {[No. of ''Type A HEV'' ULEVs Produced] × (0.025) + [No. of ''Type B HEV'' ULEVs Produced] × (0.037) + [No. of ''Type C HEV'' ULEVs Produced] × (0.050)}

(b) Only ZEVs which have been certified as LDTs 3751-5750 lbs. LVW and which have not been counted toward the ZEV requirements for PCs and LDTs 0-3750 lbs. LVW as specified in note (8) shall be included in the equation of note (4).

(c) Beginning with the 1996 model year, manufacturers that produce and deliver for sale in Connecticut LDTs 3751-5750 lbs. LVW that are certified to the Tier I exhaust emission standards in 40 CFR 86.094-9 shall add the following term to the numerator of the fleet average NMOG equation in note (4) and calculate their fleet average NMOG values accordingly: [(No. of Vehicles Certified to federal Tier I exhaust emission standards and Produced and Delivered for Sale in Connecticut) × (0.32)].

[5] As used in this subsection, the term ''small volume manufacturer'' shall mean any vehicle manufacturer with California sales less than or equal to 3000 new PCs, LDTs and MDVs per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1991, except as noted below. For manufacturers certifying for the first time in California model-year sales shall be based on projected California sales. In 2000 and subsequent model years, small volume manufacturers shall comply with the fleet average NMOG requirements set forth below.

(a) Prior to the model year 2000, compliance with the specified fleet average NMOG requirements shall be waived.

(b) In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.075 g/mi for PCs and LDTs from 0-3750 lbs. LVW calculated in accordance with note (3).

(c) In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.100 g/mi for LDTs from 3751-5750 lbs. LVW calculated in accordance with note (4).

(d) If a manufacturer's average California sales exceeds 3000 units of new PCs, LDTs, and MDVs, based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall no longer be treated as a small volume manufacturer and shall comply with the fleet average requirements applicable for larger manufacturers as specified in section 1960.1 (g) (2) beginning with the fourth model year after the last of the three consecutive model years.

(e) If a manufacturer's average California sales falls below 3000 units of new PCs, LDTs, and MDVs based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall be treated as a small volume manufacturer and shall be subject to requirements for small volume manufacturers as specified in section 1960.1 (g) (2) beginning with the next model year.

[6] In 1992 and subsequent model years, manufacturers that achieve fleet average NMOG values lower than the fleet average NMOG requirement for the corresponding model year shall receive credits in units of g/mi NMOG determined as: {[(Fleet Average NMOG Requirement) - (Manufacturer's Fleet Average NMOG Value)] × (Total No. of Vehicles Produced and Delivered for Sale in Connecticut, Including ZEVs and HEVs)}.

(a) Manufacturers with fleet average NMOG values greater than the fleet average requirement for the corresponding model year shall receive debits in units of g/mi NMOG equal to the amount of negative credits determined by the aforementioned equation. For any given model year, the total g/mi NMOG credits or debits earned for PCs and LDTs 0-3750 lbs. LVW and for LDTs 3751-5750 lbs. LVW shall be summed together. The resulting amount shall constitute the g/mi NMOG credits or debits accrued by the manufacturer for the model year.

(b) For the 1994 through 1997 model years, manufacturers shall equalize emission debits within three model years and prior to the end of the 1998 model year by earning g/mi NMOG emission credits in an amount equal to their g/mi NMOG debits, or by submitting a commensurate amount of g/mi NMOG credits to the Executive Officer that were earned previously or acquired from another manufacturer. For 1998 and subsequent model years, manufacturers shall equalize emission debits by the end of the following model year. If emission debits are not equalized within the specified time period, the manufacturer shall be subject to the Health and Safety Code section 43211 civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the emission debits are not equalized by the end of the specified time period. For the purpose of Health and Safety Code section 43211, the number of vehicles not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi NMOG emission debits for the model year by the g/mi NMOG fleet average requirement for PCs and LDTs 0-3750 lbs. LVW applicable for the model year in which the debits were first incurred.

(c) The g/mi NMOG emission credits earned in any given model year shall retain full value through the subsequent model year.

(d) The g/mi NMOG value of any credits not used to equalize the previous model-year's debit, shall be discounted by 50% at the beginning of the second model year after being earned, discounted to 25% of its original value if not used by the beginning of the third model year after being earned, and will have no value if not used by the beginning of the fourth model year after being earned.

[7] Manufacturers that produce and deliver for sale in Connecticut vehicles certified to the phase-in exhaust emission standards in section 1960.1 (f) (1), or vehicles certified to the exhaust emission standards in section 1960.1 (f) (2) or 1960.1 (g) (1) and/or ZEVs, in the 1992 and 1993 model years, shall receive emission credits as determined by the equations in footnotes [3], [4], and [6].

(a) For PCs and LDTs from 0-3750 lbs. LVW, the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.390 and 0.334 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.

(b) For LDTs from 3751-5750 lbs. LVW, the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.500 and 0.428 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.

(c) Emission credits earned prior to the 1994 model year shall be considered as earned in the 1994 model year and discounted in accordance with the schedule specified in footnote 6.

(f) **Reporting Requirements.**

(1) Delivery Reporting Requirements.

For the purposes of determining compliance with the requirements of this section, commencing with the 1998 model year, each manufacturer shall submit annually, to the Department, within 60 days subsequent to the end of each model year, a report documenting total deliveries for sale of vehicles in each engine family over that model year, in the State of Connecticut.

(2) Fleet Average Emissions Reporting Requirements.

(A) For the purposes of determining compliance with the requirements of subdivision (e) (2), commencing with the 1998 model year, each manufacturer shall submit annually to the Department, within 60 days subsequent to the end of each model year, a report which demonstrates that such manufacturer has met the fleet average emissions requirements for its fleet delivered for sale in Connecticut.

(B) Prior to the commencement of each model year, commencing with the 1998 model year, each manufacturer shall submit, to the Department, a projection of the fleet average emissions for vehicles to be delivered for sale in Connecticut during such model year.

(g) **Alternative Means of Compliance via the National Low Emission Vehicle (LEV) program.**

(1) The provisions of subsections (b) through (f) of this section shall not apply to any 1999 and subsequent model year passenger car or light duty truck sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received in the State of Connecticut for the time period specified in subdivision (3) of this subsection if a covered manufacturer, as defined at 40 CFR 86.1702, of such vehicle complies with a National LEV program adopted by the Administrator pursuant to 42 U.S.C. 7521 (a) (1) and 42 U.S.C. 7601 (a) in accordance with the provisions set forth in 40 CFR Parts 9, 85 and 86 and 63 Federal Register 926 (January 7, 1998).

(2) For the time period specified in subdivision (3) of this subsection, manufacturers may comply with National LEV or equally stringent mandatory federal standards in lieu of compliance with any program, including any mandates for sales of zero emissions vehicles, adopted by the Commissioner pursuant to the authority provided in section 177 of the Clean Air Act, 42 U.S.C. 7507, applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900.

(3) The State of Connecticut, as set forth by the provisions of this subsection, shall participate in the National LEV program from model year 1999, inclusive, until model year 2006, except as expressly provided in 40 CFR 86.1707. If, by December 15, 2000, the Administrator does not take final action to adopt standards at least as stringent as the National LEV standards provided in 40 CFR part 86 subpart R that apply to new motor vehicles in model years 2004, 2005 or 2006, participation in National LEV shall extend only until model year 2004, except as expressly provided in 40 CFR 86.1707.

(4) If a covered manufacturer, as defined at 40 CFR 86.1702, opts out of the National LEV program in accordance with the provisions of 40 CFR 86.1707, the transition from requirements imposed by the National LEV programs to the requirements imposed by the provisions of subsections (b) through (f) of this section or any program adopted by the Commissioner pursuant to the authority provided in section 177 of the Clean Air Act, 42 U.S.C. 7507, applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and medium-duty vehicles from

6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900, will proceed in accordance with 40 CFR 86.1707.

(5) Nothing in this subsection shall preclude the Commissioner from adopting and implementing requirements under section 177 of the Clean Air Act, 42 U.S.C. 7507, for heavy duty trucks and engines and diesel-powered vehicles between 6,001 and 14,000 pounds GVWR.

(h) **Fleet average enforcement.**

(1) Notwithstanding the requirement that each vehicle manufacturer meet the fleet average emission standards set forth in Table 36-3, compliance with the specified fleet average shall be waived for a vehicle manufacturer through model year 2000, provided that:

(a) such vehicle manufacturer, who is otherwise subject to Table 36-3, submits an annual report within sixty days subsequent to the end of each model year which documents the average non-methane organic gas exhaust emissions of its fleet delivered for sale into the State of Connecticut; and

(b) if such report demonstrates that the fleet mix has exceeded a fleet average emission standard set forth in Table 36-3, then such manufacturer shall submit an additional report identifying all vehicle models delivered for sale into the State of Connecticut and their corresponding certification standards and the percentage of each model delivered for sale into Connecticut and California in relation to total fleet sales.

(2) Nothing in this subsection shall prevent manufacturers that have earned credits pursuant to note 6 to subdivision (e) (2) of this section from carrying such credits to future model years in accordance with the credit provisions of note 6 to subdivision (e) (2) of this section.

(i) **Repeal provision.** The California Low Emission Vehicle, National Low Emission Vehicle and all related provisions in this section shall not be effective for 2008 and subsequent model year passenger cars and light duty trucks.

(Effective December 23, 1994, amended March 3, 1998, January 29, 1999, December 3, 2004)

Sec. 22a-174-36a. Heavy-duty diesel engines

(a) **Definitions.** For purposes of this section, the following definitions shall apply:

(1) ''Approved by CARB for sale in the State of California'' means, with respect to a heavy-duty diesel engine and a heavy-duty motor vehicle containing such engine, CARB has made a finding that such heavy-duty diesel engine or heavy-duty diesel engine family has satisfied the criteria adopted by CARB for the control of specified air contaminants contained in Title 13, Section 1956.8 of the California Code of Regulations.

(2) ''CARB'' means the California Air Resources Board.

(3) ''Executive order'' means a document issued by CARB stating that a specified heavy-duty diesel engine family or model year heavy-duty diesel engine meets all applicable requirements of Title 13 of the California Code of Regulations for certification and sale in California.

(4) ''Heavy-duty diesel engine'' means a diesel engine that is used to propel a motor vehicle with a gross vehicle weight rating of 14,001 pounds or greater.

(5) ''Heavy-duty motor vehicle'' means a motor vehicle with a gross vehicle weight rating of 14,001 pounds or greater.

(6) ''Manufacturer's certificate of origin'' means ''manufacturer's or importer's certificate of origin'' as defined in Section 14-165 of the Connecticut General Statutes.

(7) ''Model year'' means ''model year'' as defined in Section 22a-174-36 of the Regulations of Connecticut State Agencies.

(8) ''New motor vehicle'' means ''new motor vehicle'' as defined in Section 14-1 of the Connecticut General Statutes.

(9) ''Ultimate consumer'' means ''ultimate consumer'' as defined in Section 14-1 of the Connecticut General Statutes.

(b) **Applicability.**

This section shall apply to all heavy-duty diesel engines produced for the model year 2006 and subsequent model years and to new heavy-duty motor vehicles containing such engines that are sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received, in the State of Connecticut except that this section shall not apply to such engines in vehicles listed in subsection (d).

(c) **Prohibitions.**

(1) No person shall sell, lease, rent, import, deliver, or offer for sale, lease or rental a new heavy-duty motor vehicle in the State of Connecticut containing a heavy-duty diesel engine that is subject to this section unless the owner or lessor possesses documentation for such vehicle showing that such new heavy-duty diesel engine is approved by CARB for sale in the State of California.

(2) No person shall purchase, acquire or receive a new heavy-duty motor vehicle in the State of Connecticut containing a heavy-duty diesel engine that is subject to this section unless such person possesses documentation for such vehicle showing that such new heavy-duty diesel engine is approved by CARB for sale in the State of California.

(3) Documentation sufficient to satisfy subdivisions (1) and (2) of this subsection shall include an executive order or a valid manufacturer's certificate of origin stating that the subject engine is approved by CARB for sale in the State of California.

(d) **Exemptions.**

The following heavy-duty motor vehicles shall not be subject to this section:

(1) A vehicle transferred by inheritance;

(2) A vehicle transferred by decree of divorce, dissolution or legal separation entered by a court of competent jurisdiction;

(3) A vehicle purchased by a nonresident or nonresident business prior to establishing residency in the State of Connecticut;

(4) A vehicle sold for the purpose of being scrapped or dismantled;

(5) A vehicle sold directly from one dealer to another dealer;

(6) A vehicle sold for registration out of state;

(7) A vehicle designed and sold exclusively for use as ''special mobile equipment'' as defined in Section 14-165 of the General Statutes;

(8) A vehicle which has been designated to meet the standards promulgated pursuant to the authority contained in 42 U.S.C. 7521 and that is either:

(a) In the possession of a rental agency in Connecticut and is next rented with a final destination outside of Connecticut; or

(b) Registered by a rental agency in a state other than Connecticut and rented for use in Connecticut until return to the state of registration; or

(9) A vehicle that is an ambulance or emergency medical service organization vehicle, a fire department vehicle or a state or local police vehicle driven entirely or primarily in the course of providing medical, fire protection or police services.

(Adopted effective March 4, 2003)

Sec. 22a-174-36b. Low emission vehicles II program

(a) **Definitions and abbreviations.**

Provided that any term related to the administration of the Low Emission Vehicles II program not defined in this subsection shall be as defined or described in Title 13 of the California Code of Regulations, for the purposes of this section:

(1) ''Advanced technology vehicle'' means any PZEV, AT PZEV or ZEV.

(2) ''Air contaminant emission control system'' means the equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine, or system or engine modification on a motor vehicle or motor vehicle engine which causes a reduction of air contaminants emitted from the motor vehicle or motor vehicle engine, including but not limited to exhaust control systems, fuel evaporation control systems, and crankcase ventilating systems.

(3) ''Alternative fuel'' means any fuel that is commonly or commercially known or sold as one of the following: M-100 fuel methanol, M-85 fuel methanol, E-100 fuel ethanol, E-85 fuel ethanol, compressed natural gas, liquefied petroleum gas, or hydrogen.

(4) ''AT PZEV'' means advanced technology partial zero emission vehicle.

(5) ''CARB'' means the California Air Resources Board.

(6) ''Certified'' means the finding by CARB that a motor vehicle, motor vehicle engine, or motor vehicle engine family, or air contaminant emission control system has satisfied the criteria adopted by CARB for the control of specified air contaminants from motor vehicles.

(7) ''Dual-fuel'' means a motor vehicle that is engineered and designed to be capable of operating on a petroleum fuel and on another fuel that is stored separately on-board the vehicle.

(8) ''Emergency vehicle'' means any publicly owned vehicle operated by a peace officer in performance of his or her duties, any authorized vehicle used for fighting fires or responding to emergency fire calls, any publicly owned authorized vehicle used by emergency medical technicians or paramedics, or used for towing or servicing other vehicles, or repairing damaged lighting or electrical equipment, or an ambulance.

(9) ''Emission control label'' means the permanent stickers required by CARB and affixed to all passenger cars, light duty trucks and medium-duty vehicles certified for sale in California.

(10) ''Emissions-related part'' means any automotive part that affects any regulated emissions from a motor vehicle or motor vehicle engine that is subject to California or federal emissions standards, as set forth in California Code of Regulations, Title 13, section 1900(b)(3).

(11) ''EPA'' means the United States Environmental Protection Agency.

(12) ''Executive Order'' means an Executive Order of CARB.

(13) ''Fleet average emissions'' means a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases and all greenhouse gases from all vehicles that are subject to this section, sold in the State of Connecticut in any applicable model year.

(14) ''Fuel-flexible'' means an alternative fuel motor vehicle that is engineered and designed for operation using any alternative fuel mixture or blend.

(15) ''Greenhouse gas'' means any of the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.

(16) ''Greenhouse gas vehicle test group'' means ''greenhouse gas vehicle test group'' as defined in California Code of Regulations, Title 13, section 1961.1.

(17) ''Heavy-duty vehicle'' means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

(18) ''Hybrid electric vehicle'' or ''HEV'' means a motor vehicle which allows power to be delivered to the driver wheels solely by a battery powered electric motor but which also incorporates the use of a combustion engine to provide power to the battery, or any vehicle which allows power to be delivered to the drive wheels by either a combustion engine and/or by battery powered electric motor.

(19) ''Independent low volume manufacturer'' means ''independent low volume manufacturer'' as defined in California Code of Regulations, Title 13, section 1900.

(20) ''Light-duty truck'' or ''LDT'' means any 2008 and subsequent model-year motor vehicle certified to the standards in California Code of Regulations, Title 13, section 1961(a)(1) having a gross vehicle weight rating of 8500 pounds or less, and any other motor vehicle rated at 6000 pounds or less, that is designed primarily for the purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

(21) ''Loaded vehicle weight'' or ''LVW'' means vehicle curb weight plus 300 pounds.

(22) ''Low Emission Vehicle II program'' means the standards for motor vehicles, motor vehicle engines and related provisions that the State of California has adopted and is permitted to adopt under 42 USC 7543 and that the Commissioner is permitted to adopt under 42 USC 7507 as required by section 22a-174g of the Connecticut General Statutes for the implementation of such program in Connecticut.

(23) ''Medium-duty passenger vehicle'' means ''medium-duty passenger vehicle'' as defined in California Code of Regulations, Title 13, section 1900.

(24) ''Medium-duty vehicle'' means ''medium-duty vehicle'' as defined in California Code of Regulations, Title 13, section 1900.

(25) ''Military tactical vehicles and equipment'' means those vehicles defined by California Code of Regulations, Title 13, section 1905.

(26) ''Model year'' means ''model year'' as defined in 40 CFR 85.2302 and determined in accordance with the provisions of 40 CFR 85.2301 through 40 CFR 85.2304, inclusive.

(27) ''Neighborhood electric vehicle'' or ''NEV'' means a motor vehicle certified to zero emission vehicle standards and meets the definition of ''low speed vehicle'' either in California Code of Regulations, Title 13, section 385.5 or in 49 CFR 571.500.

(28) ''New vehicle'' means any passenger car or light duty truck with 7,500 miles or fewer on its odometer.

(29) ''NMOG'' means non-methane organic gas;

(30) ''Passenger car'' or ''PC'' means any motor vehicle designed primarily for transportation of persons having a design capacity of twelve persons or less.

(31) ''Offset vehicle'' means a vehicle that has been certified by the State of California as set forth in the California Code of Regulations, Title 13, section 1960.5.

(32) ''PZEV'' means partial ZEV as defined in California Code of Regulations, Title 13, section 1962.

(33) ''Small volume manufacturer'' means ''small volume manufacturer'' as defined in California Code of Regulations, Title 13, section 1900.

(34) ''Travel provision'' means the provision of the California Code of Regulations that entitles a manufacturer to full credit for each Type III ZEV placed in service prior to model year 2012 in California or any other state that has adopted the California ZEV mandate.

(35) ''Vehicle'' means any motor vehicle.

(36) ''VECs'' means vehicle equivalent credits.

(37) ''ZEV'' means a zero emission vehicle.

(b) **Applicability.**

(1) This section shall apply to all 2008 and subsequent model year passenger cars and light duty trucks sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received, in the State of Connecticut except that this subdivision shall not apply to those vehicles listed in subsection (d) of this section.

(2) This section shall apply to all 2009 and subsequent model year medium-duty vehicles sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received, in the State of Connecticut except that this subdivision shall not apply to those vehicles listed in subsection (d) of this section.

(3) The greenhouse gas emission standards set forth in subsection (c)(1)(H) of this section and related provisions in this section shall apply to all 2009 and subsequent model year passenger cars, light-duty trucks and medium-duty passenger vehicles sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received, in the State of Connecticut except that this subdivision shall not apply to those vehicles listed in subsection (d) of this section.

(c) **Prohibitions and compliance requirements.**

(1) Unless subject to an exemption listed in subsection (d) of this section, no person shall sell or register, offer for sale or lease, import, deliver, purchase, rent, lease, acquire or receive a new 2008 or subsequent model year passenger car or light duty truck or a 2009 or subsequent model year medium-duty vehicle or medium-duty passenger vehicle in the State of Connecticut unless such vehicle is certified to California emission standards and meets:

(A) The exhaust emission standards set forth in the California Code of Regulations, Title 13, sections 1956.8(g) or (h), 1960.1, 1961(a), 1962(a) or 1962.1(a);

(B) Until December 31, 2008, the emission control label and smog index label or environmental performance label requirements set forth in the California Code of Regulations, Title 13, section 1965;

(C) The evaporative emission standards set forth in the California Code of Regulations, Title 13, section 1976;

(D) The refueling emissions standards set forth in the California Code of Regulations, Title 13, section 1978;

(E) The malfunction and diagnostic system requirements set forth in the California Code of Regulations, Title 13, 1968.1;

(F) The assembly-line testing procedure requirements set forth in the California Code of Regulations, Title 13, section 2062;

(G) The specifications for fill pipes and openings of motor vehicle fuel tanks set forth in the California Code of Regulations, Title 13, section 2235;

(H) The greenhouse gas emission standards set forth in the California Code of Regulations, Title 13, section 1961.1; and

(I) On and after January 1, 2009, the emission control label and environmental performance label requirements, including smog and greenhouse gas index scores, set forth in the California Code of Regulations, Title 13, section 1965.

(2) ZEV mandate.

(A) In the 2008 model year, each manufacturer's sales fleet of passenger cars and light duty trucks produced and delivered for sale in the State of Connecticut shall contain at least the same percentage of ZEVs subject to the same requirements, including early credit, banking, and travel provisions, set forth in the California Code of Regulations, Title 13, section 1962 using Connecticut specific vehicle numbers.

(B) Alternative compliance mechanisms. As an alternative means of compliance with the requirements of subparagraph (A) of this subdivision, an automobile manufacturer may instead opt to comply with the provisions of subsection (m) of this section.

(C) Until such time that NEVs can be legally registered in Connecticut and operated with restrictions no more stringent than imposed by the State of California, manufacturers that generate ZEV credits in California through the sale of NEVs shall receive Connecticut credits for those sales. Such credits shall be transferred annually using the ZEV credit account transfer ratio determined in accordance with subsection (m)(3), as applicable to the manufacturer.

(D) Beginning with the 2009 model year, each manufacturer's sales fleet of passenger cars and light duty trucks produced and delivered for sale in the State of Connecticut shall contain at least the same percentage of ZEVs subject to the same requirements, including early credit, banking, and travel provisions, set forth in the California Code of Regulations, Title 13, section 1962.1 using Connecticut specific vehicle numbers.

(3) All vehicle manufacturers shall comply with the fleet average, warranty, recall and other applicable requirements set forth in subsections (e), (f), (g), (h), (i), (j), (k), and (n) of this section.

(d) **Exemptions.** (1) The following vehicles shall not be subject to this section:

(A) A vehicle transferred by inheritance;

(B) A vehicle transferred by decree of divorce, dissolution or legal separation entered by a court of competent jurisdiction;

(C) A vehicle purchased by a nonresident prior to establishing residency in the State of Connecticut;

(D) A vehicle sold for the purpose of being wrecked or dismantled;

(E) A vehicle sold directly from one dealer to another dealer;

(F) A vehicle sold for registration out of state;

(G) A vehicle sold designed exclusively for off-highway use;

(H) A vehicle that has been certified to standards promulgated pursuant to the authority contained in 42 U.S.C. 7521 and which is in the possession of a rental agency in Connecticut and is next rented with a final destination outside of Connecticut;

(I) an emergency vehicle;

(J) A military tactical vehicle;

(K) A vehicle exempted by California Health and Safety Code, section 43656; or

(L) A vehicle acquired by a resident of this state for the purpose of replacing a vehicle registered to such resident that was damaged or became inoperative beyond reasonable repair or was stolen while out of this state, provided that such replacement vehicle is acquired out of state at the time the previously owned vehicle was either damaged or became inoperative or was stolen.

(2) Light-duty trucks from 3,751 pounds LVW to 8,500 pounds GVW that are certified to the Option 1 LEV II standard for oxides of nitrogen set forth in the California Code of Regulations, Title 13, section 1961(a)(1) are exempt from the greenhouse gas emission standards set forth in subsection (c)(1)(H) of this section. Passenger cars, Light-duty trucks 0-3750 pounds LVW, and medium-duty passenger vehicles are not eligible for this exemption.

(e) **Emission standards, warranty, recall and miscellaneous provisions.**

Each manufacturer and each new 2008 and subsequent model year passenger car and light-duty truck that is subject to this section shall comply with each applicable standard set forth in Table 36b-1 and incorporated by reference herein:

Table 36b-1 California Code of Regulations (CCR) Title 13 Provisions Incorporated by Reference		
Title 13 CCR	**Title**	**Section Amended Date**
Chapter 1 Motor Vehicle Pollution Control Devices		
Article 1 General Provisions		
Section 1900	Definitions	04/17/09
Article 2 Approval of Motor Vehicle Pollution Control Devices (New Vehicles)		
Section 1956.8(g) and (h)	Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy Duty Engines and Vehicles	10/11/07
Section 1960.1	Exhaust Emission Standards and Test Procedures – 1981 and through 2006 Model Passenger Cars, Light-Duty and Medium-Duty Vehicles	03/26/04
Section 1961	Exhaust Emission Standards and Test Procedures – 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	06/16/08
Section 1961.1	Greenhouse Gas Exhaust Emission Standards and Test Procedures – 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles.	01/01/06
Section 1962	Zero Emission Vehicle Standards for 2005 through 2008 Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	04/17/09
Section 1962.1	Zero Emission Vehicle Standards for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles	04/17/09
Section 1965	Emission Control, Smog Index, and Environmental Performance Labels – 1979 and Subsequent Model Year Vehicles	06/16/08
Section 1968.1	Malfunction and Diagnostic System Requirements – 1994 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	11/27/99
Section 1968.2	Malfunction and Diagnostic System Requirements – 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	11/09/07
Section 1968.5	Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year	11/09/07

	Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines	
Section 1976	Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions	01/04/08
Section 1978	Standards and Test Procedures for Vehicle Refueling Emissions	01/04/08
Article 6 Emission Control System Warranty		
Section 2035	Purpose, Applicability and Definitions	11/09/07
Section 2036	Defects Warranty Requirements for 1979 through 1989 Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles; 1979 and Subsequent Model Year Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles.	5/15/99
Section 2037	Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	11/09/07
Section 2038	Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	11/09/07
Section 2039	Emission Control System Warranty Statement.	12/26/90
Section 2040	Vehicle Owner Obligations	12/26/90
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Section 2169	Recall and Corrective Action for Failures of Exhaust After-Treatment Devices.	01/04/08
Section 2170	Recall and Corrective Action for Other Emission-Related Component Failures (On-Board Diagnostic-Equipped Vehicles and Engines).	01/04/08
Section 2171	Recall and Corrective Action for Vehicles without On-Board Diagnostic Systems, Vehicles with Non-Compliant On-Board Diagnostic Systems, or Vehicles with On-Board Computer Malfunction.	01/04/08
Section 2172	Notification of Required Recall or Corrective Action by the Executive Officer.	01/04/08
Section 2172.1	Ordered or Voluntary Corrective Action Plan.	01/04/08
Section 2172.2	Approval and Implementation of Corrective Action Plan.	01/04/08
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Section 2172.5	Proof of Correction Certificate.	01/04/08
Section 2172.6	Preliminary Tests.	01/04/08
Section 2172.7	Communication with Repair Personnel.	01/04/08
Section 2172.8	Recordkeeping and Reporting.	01/04/08
Section 2172.9	Extension of Time.	01/04/08
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Section 2174	Availability of Public Hearing.	01/04/08
Chapter 4.4 Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks.		
Section 2235	Requirements.	9/17/91

(f) **Fleet average requirements, reporting and projections, and delivery reporting requirements.**

(1) Effective for 2008 and subsequent model years, the fleet average NMOG gas emission values from passenger cars and light-duty trucks vehicles produced and delivered for sale in the State of Connecticut by a manufacturer for each model year shall not exceed the fleet average numbers set forth in California Code of Regulations, Title 13, sections 1960.1(g)(2) and 1961(b)(1), except as provided in section 1960.1(g)(2) and 1961(b)(1). Effective for 2008 and subsequent model years, manufacturers may earn and bank NMOG credits in accordance with California Code of Regulations, Title 13, section 1961, except NMOG credits earned prior to model year 2011 shall be treated as though they were earned in model year 2011 and no debits shall be carried forward after model year 2011.

(2) Effective for 2009 and subsequent model years, each manufacturer shall comply with the medium-duty vehicle phase-in requirements and, for 2004 and subsequent model years, may earn and bank VECs, both in accordance with California Code

of Regulations, Title 13, section 1961, except VECs earned prior to model year 2012 shall be treated as though they were earned in model year 2012.

(3) A manufacturer that certifies vehicles equipped with direct ozone reduction technologies is eligible to receive NMOG credits for use in fleet average compliance determinations. A manufacturer shall submit to the commissioner a CARB Executive Order, obtained in accordance with California Code of Regulations Title 13, section 1960.1(g)(1), which shall determine the value of such credits for vehicles delivered for sale in the State of Connecticut, when the manufacturer submits its annual NMOG fleet average report.

(4) Credits and debits may be accrued and utilized based upon each manufacturer's sales of vehicles subject to this part in the State of Connecticut, pursuant to the provisions set forth in the California Code of Regulations Title 13, sections 1960.1(g)(2) and 1961(c).

(5) Commencing with the 2008 model year, each manufacturer shall report to the commissioner, using the same format used to report such information to CARB, the average emissions of its fleet delivered for sale in the State of Connecticut. The report shall be submitted to the commissioner, or the commissioner's designee, no later than March 1st of the calendar year succeeding the end of the model year. Commencing with the 2009 model year, such report shall include medium-duty vehicles.

(6) Delivery reporting requirements. For the purposes of determining compliance with the requirements of this section, commencing with the 2008 model year, each manufacturer shall submit annually, to the commissioner, by March 1st of the calendar year succeeding the end of the model year, a report documenting total deliveries for sale of vehicles in each engine family over that model year in the State of Connecticut. Commencing with the 2009 model year, such report shall include medium-duty vehicles.

(7) The fleet average greenhouse gas exhaust emission levels for passenger cars, light-duty trucks, and medium-duty passenger vehicles that are produced and delivered for sale in the State of Connecticut by a large volume manufacturer for each 2009 and subsequent model year are established as, and shall be determined in accordance with, the provisions set forth in California Code of Regulations, Title 13, sections 1961.1.

(8) The fleet average greenhouse gas exhaust emission levels for passenger cars, light-duty trucks, and medium-duty passenger vehicles that are produced and delivered for sale in the State of Connecticut by a small volume manufacturer or an independent low volume manufacturer for each 2016 and subsequent model year are established as, and shall be determined in accordance with, the provisions set forth in California Code of Regulations, Title 13, sections 1961.1.

(9) Greenhouse gas credits and debits may be accrued and used based on each manufacturer's sale of vehicles subject to the greenhouse gas provisions of this section in the State of Connecticut in accordance with the provisions set forth in California Code of Regulations, Title 13, section 1961.1.

(g) **Fleet Average Emissions Reporting Requirements.**

(1) For the purposes of determining compliance with the requirements of subsections (c)(3) and (e) of this section, commencing with the 2008 model year, each manufacturer shall submit annually to the Department, by March 1st of the calendar year succeeding the end of the model year, a report which demonstrates that such manufacturer has met the fleet average emissions requirements for its fleet delivered for sale in Connecticut. Commencing with the 2009 model year, such report shall include medium-duty vehicles.

(2) Prior to the commencement of each model year, commencing with the 2008 model year, each manufacturer shall submit, to the Department, a projection of the fleet average emissions for vehicles to be delivered for sale in Connecticut during such model year. Commencing with the 2009 model year, such report shall include medium-duty vehicles.

(3) Commencing with the 2009 model year, each manufacturer shall report the average greenhouse gas emissions of its fleet delivered for sale in the State of Connecticut, using the same format used to report such information to CARB. Such report shall be filed with the commissioner by March 1st of the calendar year succeeding the end of the model year and shall include the number of greenhouse gas vehicle test groups certified pursuant to subsection (m)(5) of this section, delineated by model type, delivered for sale into the State of Connecticut.

(h) **Fleet average enforcement.**

If, commencing with the 2011 model year and for each subsequent model year thereafter, the report issued by a manufacturer pursuant to subsection (g) of this section demonstrates noncompliance with the fleet average emission standards incorporated by reference into this section and set forth in Table 36b-1 of this section, during a model year, the manufacturer must within sixty (60) days file a Fleet Average Enforcement Report with the commissioner documenting such noncompliance. The Fleet Average Enforcement Reports must identify all vehicle models delivered for sale into the State of Connecticut and their corresponding certification standards and the percentage of each model delivered for sale into the State of Connecticut and California in relation to total fleet sales in the respective state. Enforcement of the medium-duty vehicle phase-in requirements shall begin in the 2012 model year.

(i) **Reporting and offset vehicle reporting.**

(1) The manufacturer shall submit one copy of the California Executive Order and Certificate of Conformity relating to certification of new motor vehicles for each engine family to be sold in the State of Connecticut to the commissioner within thirty (30) days of receiving the Executive Order from CARB. To the extent such reports are available electronically, the manufacturer shall submit such records in an electronic format acceptable to the commissioner.

(2) For the purposes of determining compliance with this section, the commissioner may require any vehicle manufacturer subject to this section to submit any documentation the commissioner deems necessary to the effective administration and enforcement of this section including all certification materials submitted to CARB.

(3) Offset vehicle reporting. Commencing with the 2008 model year, by March 1st of the calendar year succeeding the end of the model year, each manufacturer shall report to the commissioner the number of offset vehicles, categorized by model type, delivered for sale into the State of Connecticut during such model year. The report shall also include the total number of the manufacturer's fleet delivered for sale into the State of Connecticut.

(j) **Warranty requirements.**

(1) For all 2008 and subsequent model year vehicles subject to the provisions of this section and for all 2009 and subsequent model year medium-duty vehicles subject to the provisions of this section, each manufacturer shall provide a warranty to the ultimate purchaser and each subsequent purchaser that complies with the requirements set forth in California Code of Regulations, Title 13, sections 2035 through 2038, 2040 and 2046.

(2) For all 2008 and subsequent model year vehicles subject to the provisions of this section and for all 2009 and subsequent model year medium-duty vehicles subject to the provisions of this section, each manufacturer shall include the emission

control system warranty statement that complies with the requirements set forth in California Code of Regulations, Title 13, sections 2039 modified as may be necessary to inform Connecticut vehicle owners of the applicability of the California warranty. The manufacturer shall also provide a telephone number on such statement appropriate for the State of Connecticut.

(k) **Recalls.**

(1) For all 2008 and subsequent model year vehicles subject to the provisions of this section and for all 2009 and subsequent model year medium-duty vehicles subject to the provisions of this section, each manufacturer shall undertake an action equivalent to that required by any order or enforcement action taken by CARB, or any voluntary or influenced emission related recall initiated by any manufacturer pursuant to or required by California Code of Regulations, Title 13, sections 2101 through 2120, 2122 through 2133, 2135 through 2149, and 2166 through 2174, unless within thirty (30) days of CARB approval of such recall, the manufacturer demonstrates to the commissioner that such recall is not applicable to vehicles registered in the State of Connecticut.

(2) For vehicles subject to an action pursuant to subdivision (1) of this subsection, each manufacturer shall send to owners of vehicles registered in the State of Connecticut a notice that complies with the requirements set forth in California Code of Regulations, Title 13, sections 2118, 2127, or 2172.3, provided that such notice shall contain a telephone number appropriate for use in the State of Connecticut.

(*l*) **Incorporation by reference. Availability and interpretation of referenced material.**

(1) In accordance with the provisions of section 22a-174g of the Connecticut General Statutes, this section incorporates by reference certain sections of Title 13, California Code of Regulations relating to the implementation and the administration of the Low Emission Vehicle II program and subsequent greenhouse gas requirements in the State of Connecticut. Table 36b-1 lists the sections of Title 13, California Code of Regulations incorporated by reference and the respective amended date for each section.

(2) Copies of the relevant sections of Title 13, California Code of Regulations incorporated by reference in this section are available by contacting:

Connecticut Department of Environmental Protection
Bureau of Air Management
Planning & Standards Division
79 Elm Street
Hartford, Connecticut 06106
(860) 424-3027

(3) For purposes of applying the incorporated sections of the California Code of Regulations, unless clearly inappropriate, ''California'' shall mean ''Connecticut.''

(m) **Alternative compliance mechanisms.**

(1) A manufacturer may, as an alternative means of compliance with the requirements of subsection (c)(2) of this section, proceed in accordance with the provisions of subdivision (2) or (3) of this subsection.

(2) A manufacturer may earn Connecticut ZEV credits for the introduction into Connecticut of PZEVs, AT PZEVs and ZEVs provided that:

(A) The vehicle credit values for this alternative compliance path shall be the same as in the California Code of Regulations, Title 13, section 1962.

(B) After the credit value for a vehicle is established by CARB pursuant to California Code of Regulations, Title 13, section 1962, a Connecticut multiplier will be applied to such credit value for that vehicle in accordance with Table 36b-2. The Connecticut multiplier shall apply to PZEVs, AT PZEVs and ZEVs produced

for sale in Connecticut prior to the 2004 model year. Such multiplier shall not be applied to type III ZEVs.

Table 36b-2

Connecticut Multiplier

Model Year	Requirement	PZEV Credit Multiplier	AT PZEV Credit Multiplier	ZEV Credit Multiplier
2004	Voluntary Early Introduction	1.5	2.25	3
2005	Voluntary Early Introduction	1.5	2.25	3
2006	Voluntary Early Introduction	1.3	1.7	2
2007	Voluntary Early Introduction	1.15	1.3	1.5
2008	Mandatory Compliance	1.15	1.3	1.5
2009	Equivalency with California Program	1	1	1

(C) Connecticut ZEV credit use, life, banking and trading will be calculated as per California Code of Regulations, Title 13, section 1962.

(D) Each manufacturer operating under this alternative compliance path shall submit a compliance report to the commissioner along with annual sales reports no later than May 1st following the completed model year. The compliance report shall include vehicle sales organized by engine family and identify the number and type of Connecticut credits earned. Such report may be amended based on late sales.

(E) Each manufacturer operating under this alternative compliance path shall make available for purchase or lease in Connecticut any advanced technology vehicle models, including all ZEVs except type III ZEVs sold or leased in California.

(F) The commissioner shall calculate the amount of credits earned based on the report received pursuant to subparagraph (D) of this subdivision. The commissioner shall establish ZEV compliance accounts for each manufacturer and allocate the credits earned to such compliance account, including separate accounts for PZEV, AT PZEV, NEV, Type 0 ZEVs, Type I ZEVs, Type II ZEVs, Type III ZEVs, transportation system and extended service. For each account, in the event that the number of credits earned under this subdivision is less than the number of credits that would have been awarded to a manufacturer under subdivision (3) of this subsection, the commissioner shall calculate the difference and apply a number of credits equal to such difference to such manufacturer's compliance account.

(3) The commissioner shall set aside a number of Connecticut ZEV credits proportionally equivalent to the number of ZEV credits possessed by the requesting manufacturer for use in the State of California at the beginning of the 2008 model year. This transfer shall be performed only after all credit obligations for the 2007 and earlier model years have been satisfied in California. The commissioner shall multiply the manufacturer's California credit balances by the ratio of the average number of PCs and LDT1s produced and delivered for sale in Connecticut to the combined average number of PCs and LDT1s produced and delivered for sale in California in model years 2000 through 2002 or, alternatively, by the ratio of PCs

and LDT1s produced and delivered for sale in Connecticut to the combined number of PCs and LDT1s produced and delivered for sale in California in model year 2008. In either case, the commissioner shall determine the model year 2008 ZEV sales requirements in Connecticut using the same time period that determined the credit transfer ratio. The commissioner shall notify such manufacturer of the number of ZEV credits, allocated in accordance with subdivision (2)(F) of this subsection, available for use by July 31, 2008 and annually thereafter until such credits are fully consumed. Credits issued pursuant to this subdivision may only be used in Connecticut for compliance with the ZEV provisions of subsection (c)(2) of this section subject to the same requirements and limitations on credit use set forth in the California Code of Regulations, Title 13, section 1962 adjusted for Connecticut specific vehicle numbers. Furthermore, each manufacturer operating under this alternative compliance path shall:

(A) By May 1, 2008, provide the commissioner with either:

(i) the total number of PC and LDT1 vehicles produced and delivered for sale in Connecticut and California for 2000 through 2002 model years, or

(ii) the total projected number of PC and LDT1 vehicles to be produced and delivered for sale in Connecticut and California in model year 2008.

(B) (i) By March 1, 2009, any manufacturer that provides the projected number of vehicles specified in subparagraph (A)(ii) of this subdivision shall provide the commissioner with the actual number of PC and LDT1 vehicles produced and delivered for sale in Connecticut and California in model year 2008.

(ii) The commissioner shall, by June 30 2009, recalculate and adjust, either upward or downward, the number of ZEV credits granted based on actual model year 2008 production and delivery data submitted under subparagraph (B)(i) of this subdivision.

(C) By May 1, 2008, provide the commissioner with the total number of banked California ZEV credits after all 2007 model year and earlier obligations have been satisfied in California; and

(D) Until such time as full compliance is achieved with the requirements of subsection (c)(2) of this section, make available for purchase or lease in Connecticut any advanced technology vehicle models, including all ZEVs except type III ZEVs, that are sold, leased or offered for sale in California.

(4) Any manufacturer who fails to meet the requirements of its respective alternative compliance path shall be subject to full compliance with the ZEV mandate provisions set forth in subsection (c)(2) of this section.

(5) Optional alternative compliance with greenhouse gas emission standards.

(A) Greenhouse gas vehicle test groups that are certified pursuant to California Code of Regulations, Title 13, section 1961.1(e)(2)(a) in the State of California may receive equivalent credit if delivered for sale and use in the State of Connecticut; and

(B) A manufacturer shall submit to the commissioner the data set forth in California Code of Regulations, Title 13, section 1961.1(e)(2)(a)(i) for Connecticut specific and use in order to receive the credit identified in subparagraph (A) of this subdivision.

(n) **Greenhouse gas emission standards and related requirements.**

Each manufacturer subject to the greenhouse gas provisions of this section shall demonstrate compliance with such provisions as required by, and in accordance with, Code of California Regulations, Title 13, section 1961.1.

(o) **Severability.**

Each provision of this section is deemed severable, and in the event that any provision of this section is held to be invalid, the remainder of this section shall continue in full force and effect.

(Adopted effective December 3, 2004; amended December 22, 2005, August 10, 2009)

Sec. 22a-174-37. Reserved

Sec. 22a-174-38. Municipal waste combustors

(a) **Definitions.** For purposes of this section:

(1) ''Calendar quarter'' means a consecutive three-month period (nonoverlapping) beginning on January 1, April 1, July 1 or October 1.

(2) ''Calendar year'' means the twelve consecutive month period starting on January 1 and ending on December 31.

(3) ''Chief operator'' means an individual who is in direct charge of the operation of a municipal waste combustor plant and who is responsible for overall on-site supervision, technical direction, management and performance of the plant.

(4) ''Continuous burning'' means the continuous, semi-continuous or batch feeding of municipal solid waste for purposes of waste disposal, energy production or providing heat to the combustion system in preparation for waste disposal or energy production. Continuous burning does not include the use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate.

(5) ''Continuous emission monitoring system'' or ''CEM system'' means a monitoring system for continuously measuring the emissions of any pollutant from a MWC unit.

(6) ''Dioxin/furan'' means tetra-chlorinated dibenzo-p-dioxins and dibenzofurans through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.

(7) ''Dscf/mmBTU'' means dry cubic feet at standard conditions per million British thermal unit.

(8) ''Eight-hour block average'' or ''8-hour block average'' means the arithmetic mean of all hourly emission concentrations or parameter levels when a municipal waste combustor unit is operating and combusting municipal solid waste measured over any of the following three 8-hour periods of time: midnight to 8 a.m.; 8 a.m. to 4 p.m.; or 4 p.m. to midnight.

(9) ''F-factor,'' ''fc'' or ''fd'' means a ratio of combustion gas volume to heat input either unit-specific or as defined in 40 CFR 60, Appendix A, Method 19.

(10) ''Four-hour block average'' or ''4-hour block average'' means the arithmetic mean of all hourly emission concentrations or parameter levels when a municipal waste combustor unit is operating and combusting municipal solid waste measured over any of the following six 4-hour periods of time: midnight to 4 a.m.; 4 a.m. to 8 a.m.; 8 a.m. to noon; noon to 4 p.m.; 4 p.m. to 8 p.m.; or 8 p.m. to midnight.

(11) ''Historical actual twenty-four hour daily NO_x average'' means one or more calendar years of CEM data from no earlier than 1994 or another period of data approved by the commissioner as representative of NO_x emissions.

(12) ''Malfunction'' means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in a normal or usual manner. A failure that is caused in part by poor maintenance or negligent or careless operation shall not be considered a malfunction.

(13) ''Mass burn waterwall combustor'' means a field-erected combustor that combusts primarily unprocessed municipal solid waste (i.e., municipal solid waste that is not processed-municipal solid waste) in a waterwall furnace.

(14) ''Maximum demonstrated municipal waste combustor unit load'' means the highest 4-hour block average municipal waste combustor unit load achieved during four consecutive hours of operation that corresponds to a test run during the most

recent dioxin/furan emissions performance test that demonstrates compliance with the applicable limit for dioxin/furan specified in subsection (c) of this section.

(15) ''Maximum demonstrated particulate matter control device temperature'' means the highest 4-hour block average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours of operation that corresponds to a test run during the most recent dioxin/furan emissions performance test that demonstrates compliance with the applicable limit for dioxin/furan specified in subsection (c) of this section.

(16) ''mg/dscm'' means milligrams of air pollutant per dry standard cubic meter.

(17) ''Modification'' means ''modification or modified municipal waste combustor unit'' as defined in 40 CFR 60.51b.

(18) ''Municipal solid waste'' means municipal solid waste as defined in section 22a-207 of the Connecticut General Statutes.

(19) ''Municipal waste combustor,'' ''municipal waste combustor unit'' or ''MWC'' means any part or activity of any stationary source which part or activity emits or has the potential to emit any regulated air pollutant or any hazardous air pollutant, exclusive of associated air pollution control equipment, that combusts municipal solid waste, inclusive of those emissions units constructed prior to January 1, 2007 combusting a single-item waste stream of tires. Combustors that combust landfill gases collected by landfill gas collection systems are not municipal waste combustors.

(20) ''Municipal waste combustor plant'' or ''plant'' means any premises at which one or more municipal waste combustor units are situated.

(21) ''Municipal waste combustor unit load'' means the rate at which steam is produced at a municipal waste combustor (measured in lbs/hr or kg/hr).

(22) ''ng/dscm'' means nanograms of air pollutant per dry standard cubic meter.

(23) ''NO_x Emissions Reductions Credit'' or ''ERC'' means an air pollutant reduction created in the nitrogen oxides emissions trading program described by this section.

(24) ''NO_x Trading Baseline'' means that value, determined as specified in subsection (d) of this section, used to calculate the quantity of ERCs created or used by a MWC unit.

(25) ''Ozone season'' means the period of any calendar year beginning on May 1 and ending on September 30.

(26) ''Premises'' means the grouping of all stationary sources at any one location and owned by or under the control of the same person or persons.

(27) ''Processed-municipal solid waste'' means a type of municipal solid waste produced by sorting municipal solid waste by size and/or altering the size of municipal solid waste through mechanical means.

(28) ''Processed-municipal solid waste combustor'' means a steam-generating MWC that burns processed-municipal solid waste in a semisuspension firing mode using air-fed distributors.

(29) ''Reciprocating grate waste tire fired incinerator/boiler'' means a combustor that burns tires as its principal fuel.

(30) ''Scf/mmBTU'' means cubic feet at standard conditions per million British thermal unit.

(31) ''Shift operator'' means an individual who is in direct charge of the operation of a shift of a municipal waste combustor plant and who is responsible for on-site

supervision, technical direction, management and overall performance of the plant during a shift.

(32) ''Shutdown period'' means the period of time commencing when a municipal waste combustor operator discontinues the feed of municipal solid waste to the combustor in order to cease operation.

(33) ''Six-minute arithmetic average'' or ''6-minute arithmetic average'' means the arithmetic mean calculated from thirty-six (36) or more data points equally spaced over each 6-minute period.

(34) ''Standard conditions'' means a temperature of 20 degrees centigrade and a pressure of 101.3 kilopascals.

(35) ''Startup period'' means that period of time commencing when a municipal waste combustor begins the continuous burning of municipal solid waste, exclusive of any warmup period when a municipal waste combustor is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

(36) ''Total mass'' or ''total mass dioxin/furan'' means the total mass of tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans, as determined using EPA Reference Method 23 and the procedures specified under subsection (i)(4) of this section.

(37) ''Twenty-four hour daily average'' means the arithmetic mean of all hourly emission concentrations as required by this section when a unit is operating and combusting municipal solid waste measured over a 24-hour period between midnight and the following midnight.

(38) ''Twenty-four hour daily geometric average'' means the geometric mean of hourly emission concentrations as required by this section when a unit is operating and combusting municipal solid waste measured over a 24-hour period between midnight and the following midnight. The geometric mean shall be calculated using the following equation:

$$[1/n\sum_{j=1}^{n}[ln(E_{hj})]]$$

$$G = e^{\left[\frac{1}{n}\sum_{j=1}^{n}[\ln(Aj)]\right]}$$

where:

G = daily geometric average pollutant concentration, corrected to 7% O_2 or equivalent percent CO_2;

A_j = arithmetic average pollutant concentration, for hour j, corrected to 7% O_2 or equivalent percent CO_2;

n = total number of hourly averages for which pollutant concentrations are available within the 24 hour midnight to midnight daily period;

ln = the natural log function; and

e = the natural logarithmic base (2.718).

(39) ''Waterwall furnace'' means a combustion unit having energy (heat) recovery in the furnace (i.e., radiant heat transfer section) of the combustor.

(b) **Applicability.**

(1) This section shall apply to the owner or operator of any municipal waste combustor except for a MWC unit that meets the conditions of either subparagraph (A) or (B) of this subdivision:

(A) The unit is subject to 40 CFR 60 Subpart Eb and the owner has obtained for that unit a permit issued under section 22a-174-3a of the Regulations of Connecticut State Agencies, which permit contains emission limits at least as stringent as those stated in subsection (c) of this section for sulfur oxides and mercury; or

(B) The unit is subject to 40 CFR 60 Subpart AAAA and the owner has obtained for that unit a permit issued under section 22a-174-3a of the Regulations of Connecticut State Agencies, which permit contains emission limits at least as stringent as those stated in subsection (c) of this section for sulfur oxides and mercury.

(2) A physical or operational change including installation of control equipment made to a municipal waste combustor primarily to comply with any emission standard required by permit, order or regulation is not considered in determining whether the unit is a modified or reconstructed facility under this section.

(3) The owner or operator of any municipal waste combustor required to have a permit under section 3005 of the Solid Waste Disposal Act (42 U.S.C.A. section 6925) is not subject to this section for the operation of such unit.

(4) The owner or operator of any recycling facility as defined in section 22a-207 of the general statues, including a primary or secondary smelter, that combusts waste for the primary purpose of recovering metals is not subject to this section for the operation of such unit.

(5) The owner or operator of a cement kiln firing municipal solid waste is not subject to this section for the operation of such unit.

(6) The owner or operator of a municipal waste combustor unit to which this section applies shall not be subject to section 22a-174-22 of the Regulations of Connecticut State Agencies for such unit.

(c) **Emission limits.**

(1) No owner or operator of a municipal waste combustor unit subject to this section shall cause or allow the emission from such unit of any air pollutant in excess of the applicable emission limit identified in Table 38-1 of this subdivision.

Table 38-1. Air Pollutant Emission Limits.

Air pollutant	Emission limit
Particulate matter	25 mg/dscm
Cadmium	0.035 mg/dscm
Lead	0.400 mg/dscm
Mercury	0.028 mg/dscm, or 85% reduction by weight measured as required by subsection (c)(7) of this section
Sulfur dioxide -- Reciprocating grate waste tire fired incinerator/boilers	51 parts per million by volume (ppmvd), or 75% reduction by weight or volume measured as required by subsection (c)(7) of this section

Sulfur dioxide -- Mass burn waterwall combustors for which construction commenced after December 20, 1989	29 parts per million by volume (ppmvd), or 80% reduction by weight or volume measured as required by subsection (c)(7) of this section
Sulfur dioxide -- All other MWCs	29 parts per million by volume (ppmvd), or 75% reduction by weight or volume measured as required by subsection (c)(7) of this section
Hydrogen chloride	29 parts per million by volume (ppmvd), or 95% reduction by weight or volume measured as required by subsection (c)(7) of this section
Hydrogen chloride -- Mass burn waterwall combustors for which construction commenced after December 20, 1989	25 parts per million by volume (ppmvd), or 95% reduction by weight or volume measured as required by subsection (c)(7) of this section
Dioxin/furan	30 ng/dscm total mass
Opacity	10%

(3) Continuous compliance with the particulate matter, cadmium, lead, mercury, hydrogen chloride and/or dioxin/furan emission limits shall be determined based on an initial performance test, annual performance test or other appropriate performance test, as determined in writing by the commissioner, unless otherwise allowed by this section. Such tests shall be performed as required by subsection (i) of this section.

(4) Continuous compliance with the sulfur dioxide emission limits contained herein shall be based on a 24-hour daily geometric average of the hourly arithmetic average emission concentrations using CEM system outlet data if compliance is based on an emission concentration, or CEM system inlet and outlet data if compliance is based on a percent reduction.

(5) Continuous compliance with the opacity emission limit contained herein shall be based on a six-minute arithmetic average.

(6) For an air pollutant for which this subsection provides for an emission limit measured either as a concentration or as a percentage reduction by weight or volume, the less stringent emission limit shall prevail.

(7) For an air pollutant for which this subsection provides for an emission limit measured either as a percent reduction by weight or a percent reduction by volume, compliance shall be determined by measuring the concentration of air pollutant at the outlet of the air pollution control device that discharges directly to the stack, subtracting it from the concentration at the inlet of the air pollution control device that receives exhaust gases directly from the combustion chamber, dividing the difference by the concentration of air pollutant at the inlet to the air pollution control device that receives exhaust gases directly from the combustion chamber and then multiplying that result by a factor of one-hundred (100).

(8) No owner or operator of a municipal waste combustor shall cause or allow the emission of nitrogen oxides (NO_x) in excess of the applicable emission limit identified in Table 38-2 of this subdivision.

Table 38-2. Nitrogen Oxides Emission Limits.

Municipal waste combustor technology	Nitrogen oxides emission limit, measured in parts per million volume, corrected to seven percent oxygen, dry basis, or equivalent percentage carbon dioxide as specified in subdivision (12) of this subsection
Mass burn refractory combustor	177
Mass burn waterwall combustor for which construction commenced on or before December 31, 1985	200
Mass burn waterwall combustor for which construction commenced after December 31, 1985	177
Processed-municipal solid waste combustor	146
Reciprocating grate waste tire fired incinerator/boiler	79

(9) Continuous compliance with the nitrogen oxides emission limits contained herein shall be based on a 24-hour daily average.

(10) No owner or operator of a municipal waste combustor unit subject to this section shall cause or allow an emission of carbon monoxide in excess of the applicable emission limit identified in Table 38-3 of this subdivision.

Table 38-3. Carbon Monoxide Emission Limits.

Municipal waste combustor technology	Carbon monoxide emission limit, measured in parts per million volume at the combustor outlet and corrected to seven percent oxygen, dry basis, or equivalent percentage carbon dioxide as specified in subdivision (c)(12) of this section	Averaging time, in hours, calculated as an arithmetic average
Mass burn refractory combustor	100	4
Mass burn waterwall combustor	100	4
Processed-municipal solid waste combustor	200	24
Reciprocating grate waste tire fired incinerator/boiler	180	4

(11) The emission limits and operating requirements of this section shall apply at all times except during periods of startup, shutdown or malfunction as provided in this subdivision:

(A) For determining compliance with an applicable carbon monoxide emissions limit, if a loss of boiler water level control or a loss of combustion air control is

determined to be a malfunction, the duration of the malfunction period shall be limited to fifteen (15) hours per occurrence. Otherwise, the duration of each startup, shutdown or malfunction period shall be limited to three hours per occurrence for all MWC units;

(B) For the purpose of compliance with the opacity emission limits, during each period of startup, shutdown or malfunction, the opacity limits shall not be exceeded during more than five (5) 6-minute arithmetic average measurements; and

(C) During periods of startup, shutdown, or malfunction, monitoring data shall be excluded from calculations of compliance with the emission limits and operating requirements of this subdivision but shall be recorded and reported in accordance with subsections (k) and (*l*) of this section.

(12) All emission limits in this subsection, except for those identified for opacity, shall be corrected to seven percent oxygen (7% O_2), unless the owner or operator submits information to justify a correction to an equivalent percent carbon dioxide (% CO_2) and receives the commissioner's written approval. If the owner or operator of a MWC seeks to use an equivalent % CO_2, the owner or operator must demonstrate the relationship between O_2 and CO_2 levels as specified in subsection (i)(4)(J) of this section and submit a written report to the commissioner summarizing the results of the demonstration. This relationship may be reestablished during any performance test conducted pursuant to subsection (i) of this section.

(13) Reserved.

(14) Notwithstanding subparagraphs (D), (E) and (F) of subdivision (4) of subsection (i) of this section, for the purpose of submitting compliance certifications or for the purpose of the commissioner establishing whether the owner or operator has violated or is in violation of any emission limit or standard in this subdivision, nothing shall preclude the commissioner's use, including the exclusive use, of any appropriate performance test results, credible evidence or information relevant to demonstrating compliance with the applicable requirements of this section.

(15) Notwithstanding subdivision (12) of this subsection, the owner or operator of a reciprocating grate waste tire fired incinerator/boiler shall correct all emission limits, except for those identified for opacity, to 12% CO_2.

(d) **Nitrogen oxides (NO_x) emissions trading program.**

(1) The owner or operator of a MWC unit for which construction commenced prior to December 20, 1989 may use emissions trading to meet some or all of the NO_x emission reductions required for compliance with the emission limits in subsection (c)(8) of this section, subject to the limitations described in this subsection for the NO_x emissions trading program.

(2) The owner or operator of a municipal waste combustor for which construction commenced on or after December 20, 1989 may participate in the NO_x emissions trading program described in this subsection as follows:

(A) Such owner or operator may not use NO_x Emission Reduction Credits (ERCs) to comply with the applicable NO_x emission limits in subsection (c) of this section; and

(B) Such owner or operator may create ERCs in accordance with the requirements of this subsection if actual NO_x emissions from a unit are lower than the applicable NO_x emission limits in subsection (c) of this section and lower than any applicable NO_x Trading Baseline.

(3) For inclusion in the NO_x emissions trading program, an owner or operator of a municipal waste combustor unit shall submit a NO_x trading protocol to the commissioner for review and written approval on or before December 1, 1999. The protocol shall include, at a minimum:

(A) A formal request to participate in the NO_x trading program;

(B) A NO_x Trading Baseline and supporting data. The NO_x Trading Baseline shall be determined as follows:

(i) If the historical actual twenty-four hour daily NO_x average (ppmv @ 7% O_2 or ppmv @ an equivalent % CO_2, as specified in subdivision (12) of subsection (c) of this section) is higher than the applicable NO_x limit set forth in subsection (c) of this section, then the applicable subsection (c) NO_x limit shall be the NO_x Trading Baseline,

(ii) If the historical actual twenty-four hour daily NO_x average (ppmv @ 7% O_2 or ppmv @ an equivalent % CO_2, as specified in subdivision (12) of subsection (c) of this section) is lower than the applicable NO_x limit set forth in subsection (c) of this section and such lower average concentration is the result of installation of control equipment or modification of a MWC unit solely for the purposes of meeting the requirements of this regulation or section 22a-174-22 of the Regulations of Connecticut State Agencies, then the applicable NO_x limit of subsection (c) of this section shall be the NO_x Trading Baseline. Control equipment or modifications installed prior to 1990, or installed on new sources since 1990 or installed to meet BACT or LAER requirements shall not be considered as having been installed as a result of the requirements of this section or section 22a-174-22, or

(iii) If the historical actual twenty-four hour daily NO_x average (ppmv @ 7% O_2 or ppmv @ an equivalent % CO_2, as specified in subsection (c)(12) of this section) is lower than the applicable NO_x limit set forth in subsection (c) of this section, then a NO_x Trading Baseline shall be established based on the historical actual twenty-four hour daily NO_x average;

(C) A detailed methodology for determining and recording hourly heat input (mmBTU/hr); and

(D) All calculations, using the formulas provided in subdivision (4)(E) of this subsection, of the number of ERCs created and/or used. Calculations shall specify unit-specific values for NO_x limits, f-factors and CO_2 correction factors, as applicable.

(4) The owner or operator of a municipal waste combustor unit participating in the MWC NO_x emissions trading program shall use the following methodology to determine on a daily basis the quantity of ERCs created or used:

(A) Calculate NO_x Daily Average Concentration (24-hour block arithmetic average basis) and compare it to the applicable NO_x limit of subsection (c)(8) of this section;

(B) If the NO_x Daily Average Concentration is greater than the applicable NO_x limit of subsection (c)(8) of this section, then calculate the number of ERCs used;

(C) If the NO_x Daily Average Concentration is less than the applicable NO_x limit of subsection (c)(8) of this section but greater than the NO_x Trading Baseline, then ERCs shall neither be used nor created;

(D) If the NO_x Daily Average Concentration is less than the NO_x Trading Baseline, calculate the number of ERCs created; and

(E) Use the following formulas to calculate the number of ERCs used or created:

lbs ERCs used =

[NO_x Daily Average Concentration - (0.95 x applicable NO_x limit of sub section
(c)(8) of this section)]
x [1.194 x 10^{-7}] x [Diluent Correction] x [f-factor]
x [Daily Heat Input Rate Average]
x [# of Actual Operating Hours in the Daily Averaging Period]

lbs ERCs created =

[NO_x Trading Baseline - NO_x Daily Average Concentration]
x [1.194 x 10^{-7}] x [Diluent Correction] x [f-factor]
x [Daily Heat Input Rate Average]
x [# of Actual Operating Hours in the Daily Averaging Period]
x [0.85]

where:

NO_x Daily Average Concentration: Average of all valid hourly NO_x values (ppmvd @ 7% O_2 or ppmv @ an equivalent % CO_2) recorded during the Daily Averaging Period.

1.194 x 10^{-7}: NO_x concentration conversion factor.

Diluent Correction: If O_2 is used as the diluent, then the diluent correction = [20.9 / 20.9 - 7]. If CO_2 is used as the diluent, then the diluent correction = [100 / equivalent % CO_2].

f-factor: If O_2 is used as the diluent, then fd is in the units of dscf/mmBTU. If CO_2 is used as the diluent, then fc is in the units of scf/mmBTU. An f-factor may be either unit-specific or adopted from Table 19-1 in 40 CFR 60, Appendix A, Method 19.

Daily Heat Input Rate Average: Average of all valid hourly Heat Input Rate values (mmBTU/hr) recorded during the Daily Averaging Period.

Daily Averaging Period: The total of all operating hours in a day during which municipal solid waste is being fed to a boiler and/or when the boiler load is at least 75% of maximum rated capacity.

NO_x Trading Baseline: The NO_x concentration used as the baseline from which ERC creation is determined. The Trading Baseline will be the applicable NO_x limit of subsection (c)(8) of this section or, if the historical actual daily average concentration is less than the applicable NO_x limit of subsection (c)(8) of this section, the value established by the commissioner (ppmvd @ 7% O_2 or ppmv @ an equivalent % CO_2).

0.85: This factor represents 10% ERC retirement for environmental benefits and 5% retirement for heat input measurement uncertainties. If the owner or operator installs and calibrates exhaust gas flow monitors in a manner acceptable to the commissioner, certifies that the equipment specifications have been met and are being met and uses such monitors to determine heat input to the unit, then 0.90 can be substituted for 0.85.

(5) Any MWC owner or operator seeking to create ERCs pursuant to this subsection shall:

(A) In accordance with subsection (k) of this section, maintain records for each MWC unit showing daily NOx mass emissions, actual NO_x concentrations (24-hour average), daily operating hours and ERCs created;

(B) Submit a written request to the commissioner for approval of ERCs created prior to the use, sale or transfer of such ERCs. Such request shall include the following minimum information:

(i) the monthly operating reports of actual fuel use in mmBTU,

(ii) the daily actual NOx mass emissions and NO_x concentrations (24-hour average),

(iii) the number of valid data hours in each 24-hour period for which approval is requested,

(iv) the number of operating hours per day, and

(v) the quantity of ERCs created; and

(C) Create all such ERCs prior to January 1, 2009.

(6) Any MWC owner or operator intending to use ERCs pursuant to this subsection shall:

(A) No later than the first day of each calendar month, calculate, in tons, ERCs per month for each MWC unit, the projected maximum number of ERCs required for that calendar month using the formulas provided in subdivision (4)(E) of this subsection;

(B) No later than the first day of each calendar month, acquire a sufficient number of ERCs approved by the commissioner to match the quantity needed as determined according to subparagraph (A) of this subdivision. The quantity needed may be satisfied with unused ERCs created or acquired in previous months, subject to the restrictions of subparagraph (D) of this subdivision. Credits to be used during the ozone season must have been generated during the ozone season;

(C) No later than the twentieth day of each month, calculate and record the actual quantity of ERCs used in the preceding calendar month;

(D) Maintain documentation demonstrating that ERCs used during the ozone season were generated during an ozone season. An ERC generator certification shall be sufficient for such demonstration;

(E) An ERC used to meet the emission limits contained herein shall have been created within the five calendar years preceding the year of such ERC use; and

(F) For the purposes of subparagraph (E) of this subdivision, an ERC is considered created in the same calendar year the NO_x emission reduction occurs at a plant or source.

(7) No later than March 1 of each year, the MWC owner or operator shall provide to the commissioner a report containing the following information:

(A) A record for the previous calendar year of each use, sale or other transfer of any and all of the ERCs created in accordance with this subsection; and

(B) A record for the previous calendar year of actual NO_x emissions from the facility and each MWC unit, the quantity of ERCs created and the quantity of ERCs used, on a monthly basis and an ozone season basis.

(8) Any reports required by this subsection shall be made on forms furnished or prescribed by the commissioner.

(9) Any creation or use of ERCs for the purposes of this subsection shall conform to the provisions of the U.S. Environmental Protection Agency's ''Economic Incentive Program Rules,'' 40 CFR 51, Subpart U.

(10) Any emission reductions under this subsection for the purposes of ERC creation shall:

(A) Be calculated in a reliable and replicable manner; and

(B) Not be a reduction required by any provision of the state implementation plan at the time the reduction was made, and shall not be a reduction relied upon in an applicable attainment demonstration or required by state or federal permit or order, except where a state or federal permit or order is used to set a NO_x trading baseline as defined by subdivision (3) of this subsection.

(11) It shall be a violation of this section if the calculation specified by subdivision (6)(C) this subsection demonstrates that any MWC owner or operator did not hold or acquire a sufficient number of ERCs to comply with the NO_x emission limits contained herein. In addition, the MWC owner or operator shall acquire additional ERCs in an amount equal to three (3) ERCs for every one (1) ERC needed for compliance, had the ERCs been held or acquired at the time specified in subdivision (6)(B) of this subsection. The additional ERCs shall be acquired on or before the last day of the calendar month in which the calculation specified by subdivision (6)(C) of this subsection is performed. Nothing herein shall preclude the commissioner from taking other enforcement action against the owner or operator for failing to hold or acquire a sufficient number of ERCs prior to their use.

(12) All ERCs created pursuant to this section shall expire prior to May 1, 2013. On and after May 1, 2013, the use or trading of ERCs created pursuant to this section is prohibited.

(f) **Fugitive ash emissions.**

(1) No owner or operator of a municipal waste combustor plant shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system, including conveyor transfer points, in excess of five percent (5 %) of the observation period (i.e., nine (9) minutes per three-hour period), as specified in subsection (i)(4)(I) of this section.

(2) The emission limit specified in subdivision (1) of this subsection does not cover visible emissions discharged inside buildings or within enclosures of ash conveying systems; however, the emission limit specified in subdivision (1) of this subsection does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.

(3) The provisions specified in subdivision (1) of this subsection do not apply during maintenance and repair of ash conveying systems, however, all reasonable measures to control fugitive emissions on such occasions shall be implemented.

(g) **Operating practices.**

(1) No owner or operator of a municipal waste combustor unit shall cause or allow such unit to operate at a temperature, measured at each particulate control device inlet, more than seventeen (17) degrees centigrade, based on a 4-hour block average, above the maximum demonstrated particulate control device temperature measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved.

(2) No owner or operator of a municipal waste combustor unit shall cause or allow such unit to operate at a municipal waste combustor unit load greater than one hundred ten percent (110%) of the maximum demonstrated municipal waste combustor unit load, based on a 4-hour block average, measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved. Municipal waste combustor unit load shall be measured by a steam flow meter.

(3) An owner or operator may, notwithstanding subdivisions (1) and (2) of this subsection, during the annual dioxin/furan emissions performance test and for two (2) weeks prior to such test, allow temperatures in excess of that specified in subdivision (1) of this subsection and municipal waste combustor unit load limits in excess of that specified in subdivision (2) of this subsection. However, should the owner or operator operate the unit at such excess temperatures and load, the owner or operator shall not again be allowed to operate at such excess temperatures and load during that test period without the approval of the commissioner should the annual dioxin/furan emission performance test be postponed.

(4) The particulate matter control device temperature limits, municipal waste combustor unit load limit and the average carbon mass feed rate may be waived temporarily by the commissioner to allow evaluation of system performance, testing of new technology or control technologies or diagnostic testing, provided that any such temporary waiver is authorized through a permit or order issued prior to an evaluation of system performance, testing of new technology or control technologies or diagnostic testing.

(5) During the operation of a MWC unit, the carbon injection system operating parameter(s) that is the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) shall be averaged over a block 8-hour period, and the 8-hour block average shall equal or exceed the level(s) documented during the performance tests specified under subsection (i) of this section.

(6) Notwithstanding subdivision (5) of this subsection, during the annual dioxin/furan or mercury performance test and the two weeks preceding the annual dioxin/furan or mercury performance test, no limit is applicable for the average mass carbon feed rate if the provisions of subdivision (4) of this subsection are met.

(h) **Operator training and certification.**

(1) No owner or operator of a municipal waste combustor plant shall cause or allow such plant to be operated at any time unless a certified chief operator or shift operator is physically present at the plant.

(2) Operators shall be certified by the commissioner under section 22a-231-1 of the Regulations of Connecticut State Agencies and shall be identified as either a Class I or Class II chief operator or a Class I or Class II shift operator.

(3) Not later than six (6) months after the date of employment, all chief operators and shift operators must satisfactorily complete an operator training course conducted by the commissioner.

(4) The owner or operator of a municipal waste combustor shall have a site-specific Municipal Waste Combustor Operating & Maintenance Manual with an index. Such Municipal Waste Combustor Operating & Maintenance Manual shall be updated on an annual basis. The Municipal Waste Combustor Operating & Maintenance Manual shall include:

(A) A summary of the applicable emission limits and operational requirements;

(B) A description of basic combustion theory applicable to a municipal waste combustor unit;

(C) Procedures for receiving, handling, and feeding municipal solid waste;

(D) Procedures for startup, shutdown and malfunction;

(E) Procedures for maintaining proper combustion air supply levels;

(F) Procedures for operating the combustor within the standards established under this section;

(G) Procedures for responding to periodic upset or off-specification conditions;

(H) Procedures for minimizing particulate matter carryover;

(I) Procedures for handling ash;

(J) Procedures for monitoring emissions; and

(K) Procedures for reporting and record keeping.

(5) The owner or operator of a municipal waste combustor plant shall establish a training program to review the Municipal Waste Combustor Operating & Maintenance Manual with each person who has responsibilities affecting the operation of a MWC plant including, but not limited to, the chief operator, shift operator, ash handler, maintenance employee and crane/load handler. The owner or operator shall train new employees with the job positions identified in this subdivision prior to

each new employee's assumption of any responsibilities at a MWC plant. Following initial training, the training program shall be repeated on an annual basis for each person identified in this subdivision.

(6) The Operating & Maintenance Manual shall be kept in a location readily accessible to all persons identified in subdivision (5) of this subsection and shall be available for inspection by the commissioner or Administrator upon request.

(i) **Performance testing.**

(1) All performance tests shall be conducted under representative full load operating conditions.

(2) The owner or operator of a municipal waste combustor shall conduct an annual performance test for dioxin/furan, particulate matter, hydrogen chloride, cadmium, lead, mercury and fugitive ash at least once per calendar year. Such test shall be conducted no less than nine (9) calendar months and no more than fifteen (15) calendar months following the previous performance test for such pollutant.

(3) Notwithstanding subdivision (2) of this subsection, upon demonstration for two (2) consecutive years that the dioxin/furan emission levels from all units at a MWC plant for which construction commenced prior to September 20, 1994 are less than fifteen (15) ng/dscm total mass or, for all units for which construction, modification or reconstruction commenced on or after September 20, 1994, and are less than seven (7) ng/dscm total mass, the MWC owner or operator shall only be required to conduct performance testing for dioxin/furan on one unit at that MWC plant. The owner or operator shall rotate performance testing among units in a fixed sequence so that each unit is tested at the same frequency. One unit at the plant shall be tested at least once per calendar year, and such test shall be conducted no less than nine calendar months and no more than 15 calendar months following the previous performance test. If in any year following the year of election of such reduced testing, the dioxin/furan emission test results indicate a level equal to or greater than fifteen (15) ng/dscm total mass for any unit for which construction commenced prior to September 20, 1994, or greater than seven (7) ng/dscm total mass for any unit for which construction, modification or reconstruction commenced on or after September 20, 1994, then the MWC owner or operator shall resume testing of all units at the MWC plant during the next annual performance test. The owner or operator shall continue to test all units on an annual basis until the performance tests for all units indicate dioxin/furan emission levels that meet the requirements of this subdivision, at which time the owner/operator may resume testing in accordance with this subdivision.

(4) Each MWC owner or operator shall employ the following methodologies:

(A) Testing for particulate matter and opacity levels shall be conducted in accordance with the following procedures:

(i) 40 CFR 60, Appendix A, Reference Method 1 shall be used to select the sampling site and number of traverse points for particulate matter testing,

(ii) 40 CFR 60, Appendix A, Reference Method 3 shall be used for flue gas analysis for particulate matter testing,

(iii) 40 CFR 60, Appendix A, Reference Method 5 or 29 shall be used for determining compliance with the particulate matter emission limit. For each Method 5 or Method 29 test run: the minimum sample volume shall be 1.7 cubic meters; the probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160 [+/- 14] degrees centigrade; and an oxygen or carbon dioxide measurement shall be obtained simultaneously. For each Method 29 test run, the minimum sample time shall be two (2) hours,

(iv) 40 CFR 60, Appendix A, Reference Method 9 shall be used for determining compliance with the opacity emissions limit, except as provided under 40 CFR 60.11(e), and

(v) The compliance determination for particulate matter shall be based on an arithmetic average determined using all data generated in three (3) test runs as required by this section;

(B) Testing for cadmium and lead levels shall be conducted in accordance with the following procedures:

(i) 40 CFR 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points,

(ii) 40 CFR 60, Appendix A, Reference Method 3 shall be used for flue gas analysis,

(iii) 40 CFR 60, Appendix A, Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits,

(iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under this section,

(v) The minimum sample time shall be two (2) hours per each Method 29 test run, and

(vi) The compliance determinations for cadmium and lead shall be based on an arithmetic average determined using all data generated in three (3) test runs as required by this section;

(C) Testing for mercury levels shall be conducted in accordance with the following procedures:

(i) 40 CFR 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points,

(ii) 40 CFR 60, Appendix A, Reference Method 3 shall be used for flue gas analysis,

(iii) 40 CFR 60, Appendix A, Reference Method 29 shall be used for determining compliance with the mercury emission limits. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for mercury required under this section,

(iv) The minimum sample time shall be two (2) hours per each Method 29 test run,

(v) The percent reduction in the potential mercury emissions ($\%P_{Hg}$) is computed using the following:

$$\left(\%P_{Hg}\right) = \left(\frac{E_i - E_o}{Ei}\right) x\ 100$$

where:

$\%P_{hg}$ = percent reduction of the potential mercury emissions achieved.

E_i = potential mercury emission concentration measured at the control device inlet, corrected to 7% O_2 (dry basis).

E_o = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7_2 (dry basis), and

(vi) The compliance determinations for mercury shall be based an arithmetic average of emission concentrations or percent reductions determined using all data generated in a minimum of at least three (3) test runs as required by this section;

(D) Compliance with the sulfur dioxide emission limit (measured as a concentration or as a percent reduction by weight or volume) shall be determined by using the CEM system specified in subsection (j)(1) of this section;

(E) Compliance with the nitrogen oxide emission limit shall be determined by using the CEM system specified in subsection (j)(1) of this section;

(F) Compliance with the carbon monoxide emission limit shall be determined by using the CEM system specified in subsection (j)(1) of this section;

(G) Testing for hydrogen chloride levels shall be conducted in accordance with the following procedures:

(i) 40 CFR 60, Appendix A, Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time for Method 26 shall be one (1) hour,

(ii) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 26 test run for hydrogen chloride required by this section,

(iii) The percent reduction in potential hydrogen chloride emissions (% P_{HCl}) shall be computed using the following equation:

$$\left(\%P_{HCl}\right) = \left(\frac{E_i - E_o}{Ei}\right) x\ 100$$

where:

$\%P_{HCl}$ = percent reduction of the potential hydrogen chloride emissions achieved.

E_i = potential hydrogen chloride emission concentration measured at the control device inlet, corrected to 7% O_2 (dry basis).

EE_o = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 % O_2 (dry basis), and

(iv) The compliance determination for hydrogen chloride shall be based on an arithmetic average of emission concentrations or percent reductions determined using all data generated in three (3) test runs as required by this section;

(H) Testing for dioxin/furan levels shall be conducted in accordance with the following procedures:

(i) 40 CFR 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points,

(ii) 40 CFR 60, Appendix A, Reference Method 3 shall be used for flue gas analysis,

(iii) 40 CFR 60, Appendix A, Reference Method 23 shall be used for determining the dioxin/furan emission concentration,

(iv) The minimum sample time shall be four (4) hours per test run,

(v) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 23 test run for dioxin/furan required by this section, and

(vi) The compliance determination for dioxin/furan levels shall be based on an arithmetic average determined using all data generated as required by this section in three (3) test runs;

(I) Testing for fugitive ash emissions shall be conducted in accordance with the following procedures:

(i) 40 CFR 60, Appendix A, Reference Method 22 shall be used for determining compliance with the fugitive ash emissions limit,

(ii) The minimum observation time shall be a series of three (3) one-hour observations, and

(iii) The observation period shall include representative operational times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks;

(J) Testing for the relationship between carbon dioxide and oxygen shall be conducted in accordance with the following procedures:

(i) At least three (3) test runs of CO_2 and O_2 diluent data shall be obtained using the procedures and methods contained in 40 CFR 60, Appendix A, Reference Method 3A or 3B,

(ii) For each test run, using the following equation, a calculation shall be made of the CO_2 correction factor which is equivalent to a 7% O_2 correction factor:

$$CO_2 \text{ correction factor} = \frac{13.9}{(20.9 - O_{2\,measured})} x\ CO_{2\,measured}$$

, and

(iii) Calculation of a unit-specific equivalent CO_2 correction factor shall be the arithmetic mean of the result obtained from the three (3) test runs and the calculation of the CO_2 correction factor for each test run pursuant to subparagraph (J)(ii) of this subdivision, rounded to the nearest whole number; and

(K) During the performance tests for dioxin/furan and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as follows:

(i) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions, and

(ii) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions.

(j) **Compliance monitoring.**

(1) Continuous compliance with the emission limits specified in this section for opacity, sulfur dioxide (SO_2), SO_2 reduction efficiency, nitrogen oxides (NO_x) and carbon monoxide shall be determined based on continuous emission monitoring system data. The owner or operator of a municipal waste combustor shall install, operate and calibrate such continuous emission monitoring system in a manner acceptable to the commissioner and certify to the commissioner, in writing, that the equipment specifications for the continuous emission monitoring system have been and are being met. In addition to the aforementioned continuous monitoring systems, the owner or operator of a municipal waste combustor shall also install, operate, calibrate and maintain continuous monitoring systems for measuring the final particulate control device inlet temperature, municipal waste combustor unit load and the oxygen or carbon dioxide content of the flue gas at each location where carbon dioxide, sulfur dioxide or nitrogen oxide emissions are monitored, and, if activated carbon is used to control dioxin/furan or mercury emissions, the carbon feed rate. CEM systems shall meet the following requirements:

(A) Opacity monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 1; section 22a-174-4 of the Regulations of Connecticut State Agencies; and 40 CFR 60.13;

(B) O_2 and CO_2 monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 3; 40 CFR 60, Appendix F, Procedure 1; and 40 CFR 60.13;

(C) SO_2 monitors shall:

(i) Meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 2; 40 CFR 60, Appendix F, Procedure 1; and 40 CFR 60.13, and

(ii) For units that have actual inlet emissions less than 100 ppmdv, the relative accuracy criterion for inlet sulfur dioxide CEM systems should be no greater than twenty percent (20%) of the mean value of the reference method test data in terms of the units of the emission standard, or five ppmdv absolute value of the mean difference between the reference method and the continuous emission monitoring systems, whichever is greater;

(D) NO_X monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 2; 40 CFR 60, Appendix F, Procedure 1; and 40 CFR 60.13;

(E) Carbon monoxide monitors shall:

(i) Meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 4 or 4A (as applicable); 40 CFR 60, Appendix F, Procedure 1 and 40 CFR 60.13, and

(ii) For units subject to the 100 ppmdv carbon monoxide standard, the relative accuracy criterion of five ppmdv is calculated as the absolute value of the mean difference between the reference method and the CEM system;

(F) Continuous monitoring systems for MWC unit load shall meet the requirements of 40 CFR 60.1810(a); and

(G) If activated carbon is used to control dioxin/furan or mercury emissions:

(i) Monitoring of the carbon feed rate shall meet the requirements of 40 CFR 60.1820, and

(ii) Pneumatic injection pressure or another carbon injection system operational indicator shall be used to provide additional verification of proper carbon injection system operation. The operational indicator shall provide an instantaneous visual or audible alarm to alert the operator of a potential interruption in the carbon feed that would not normally be indicated by direct monitoring of carbon mass feed rate (e.g. continuous weight loss feeder) or monitoring of the carbon system operating parameter or parameters that are the indicator or indicators of the carbon mass feed rate (e.g. screw feeder speed). The carbon injection system operational indicator used to provide additional verification of carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm, shall be included in the site-specific Municipal Waste Combustor Operating & Maintenance Manual.

(2) A MWC owner or operator shall comply with the following minimum data requirements:

(A) Data available for gaseous and process CEMs shall not be less than ninety percent (90%) of the total operating hours in any one calendar quarter and not less than ninety-five percent (95%) of the total operating hours in any one calendar year;

(B) Data available for opacity CEMs shall not be less than ninety-five percent (95%) of the total operating hours in any one calendar quarter;

(C) Obtain valid 1-hour averages for seventy-five percent (75%) of the operating hours per day for ninety percent (90%) of the operating days per calendar quarter during which the unit combusts any municipal solid waste;

(D) At least three equally spaced data points per hour shall be used to calculate a one-hour average;

(E) Notify the commissioner according to subsection (*l*)(3)(A)(v) of this section in the event of failure to obtain the minimum data required by subparagraphs (A) and (B) of this subdivision; and

(F) The percentage of data available shall be calculated as follows:

(i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and

(ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by this section regardless of whether the minimum data availability requirements of subparagraphs (A) and (B) of this subdivision are obtained.

(3) During a loss of boiler water level control or a loss of combustion air control malfunction period, a diluent cap of fourteen percent for oxygen or five percent for carbon dioxide may be used in the emissions calculations for sulfur dioxide and nitrogen oxides.

(k) **Record keeping requirements.**

(1) The owner or operator of a municipal waste combustor shall maintain records of the information specified in subdivisions (2) through (13) of this subsection, as applicable, labeling each record with the time and calendar date on which the data was generated. Each record shall be maintained for a period of at least five (5) years from the date the record was created.

(2) Operator training and certification records shall be maintained on an annual basis, as follows:

(A) The names of the chief operators and shift operators, certified by the commissioner, and employed at the plant, including the dates of initial and renewal certifications and documentation of current certification;

(B) The names of the chief operators and shift operators who have completed an operator training course as required under subsection (h)(3) of this section; and

(C) The names of the persons at the plant who have completed a training program as required under subsection (h)(5) of this section.

(3) Emission concentrations and parameters, measured using a CEM system, shall be recorded as specified in this subdivision:

(A) All six-minute arithmetic average opacity levels;

(B) All one-hour average sulfur dioxide emission concentrations;

(C) All one-hour average sulfur dioxide reduction efficiency levels;

(D) All one-hour average nitrogen oxides emission concentrations; and

(E) All one-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures.

(4) Average concentrations and percent reductions, as applicable, shall be maintained as specified in this subdivision:

(A) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions;

(B) All 24-hour daily average nitrogen oxides emission concentrations;

(C) All 4-hour block or 24-hour daily average carbon monoxide emission concentrations, as applicable; and

(D) All 4-hour block average municipal waste combustor unit loads and particulate matter control device inlet temperatures.

(5) The calendar dates when any of the average emission concentrations, percent reductions, operating parameters or opacity levels recorded under subdivisions (3) or (4) of this subsection are above the applicable limit shall be identified. The reasons for such exceedances, a description of corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded.

(6) The calendar dates for which the minimum number of hours of any of the data required by this section have not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data.

(7) Where sulfur dioxide emissions data, nitrogen oxides emissions data or operational data (i.e., carbon monoxide emissions, municipal waste combustor unit load and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, the owner or operator shall identify such exclusion as well as the reason(s) for excluding the data.

(8) The results of daily calibrations and quarterly accuracy determinations for opacity, sulfur dioxide, nitrogen oxides, carbon monoxide and oxygen or carbon dioxide continuous emission monitoring systems shall be recorded.

(9) The test reports and supporting calculations documenting the results of an initial performance test conducted to determine compliance with the emission limits specified in this section for particulate matter, opacity, cadmium, lead, mercury, dioxin/furan emissions, hydrogen chloride and fugitive ash shall be recorded. The maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature shall be recorded for the initial performance test for dioxin/furan emissions for each particulate matter control device. The test results and supporting calculations documenting the relationship between carbon dioxide and oxygen concentrations established in accordance with this section shall be recorded if established during the initial performance test.

(10) The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits specified in this section for particulate matter, cadmium, lead, mercury, dioxin/furan emissions, hydrogen chloride and fugitive ash shall be recorded. The maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device) shall be recorded for each performance test for dioxin/furan emissions. The relationship between carbon dioxide and oxygen concentrations shall be recorded if the relationship is reestablished during the annual performance test.

(11) For MWCs equipped with activated carbon injection systems for mercury or dioxin/furan emissions control, the records specified in this subdivision shall be maintained:

(A) Estimates of the average carbon mass feed rate, measured in kilograms per hour or pounds per hour, during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations;

(B) Estimates of the average carbon mass feed rate, measured in kilograms per hour or pounds per hour, during the initial dioxin/furan emissions performance test and all subsequent annual performance tests, with supporting calculations;

(C) Estimates of the average carbon mass feed rate, measured in kilograms per hour or pounds per hour, for each hour of operation, with supporting calculations;

(D) For each calendar quarter, estimates of the total carbon usage for each MWC unit in kilograms or pounds for each calendar quarter by two independent methods, according to the procedures specified below:

(i) For each MWC unit, estimate the weight of carbon delivered, and

(ii) For each MWC unit, estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation based on the parameters specified under subsection (i)(4)(K) of this section, and sum the results for the total number of hours of operation during the calendar quarter;

(E) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed); and

(F) The times and calendar dates when average carbon mass feed rates were less than either of the hourly carbon feed rates estimated during mercury or dioxin/furan emissions tests. The reasons for such feed rates and a description of corrective actions taken shall also be recorded.

(12) For each MWC unit, the following records of air pollution control device operation shall be maintained:

(A) For each reagent, the feed rate to the air pollution control device, measured in kilograms per hour or pounds per hour, during the annual particulate emissions performance tests, with supporting calculations;

(B) For each reagent, the feed rate to the air pollution control device, measured in kilograms per hour or pounds per hour, for each hour of operation, with supporting calculations; and

(C) For each calendar quarter, total reagent usage for each MWC unit in kilograms or pounds for each calendar quarter.

(13) For each MWC unit, the following information shall be recorded daily:

(A) Daily fossil fuel usage rates for each fuel; and

(B) Daily hours of operation, in which periods of startup and shutdown are distinguished.

(*l*) **Reporting requirements.**

Reserved.

(2) For each MWC unit, the MWC owner or operator shall submit a quarterly report to the commissioner within thirty (30) days following the end of each calendar quarter in which the data were collected. Each quarterly report shall include the following information:

(A) All data recorded pursuant to this section during the calendar quarter;

(B) Each calendar date during the calendar quarter reported when any of the average emission concentrations, percent reductions, operating parameters or opacity levels recorded exceeded the applicable limit identified in this section; the reasons the limit was exceeded and a description of the corrective actions taken;

(C) For MWCs equipped with activated carbon injection systems for mercury or dioxin/furan emissions control, the following information:

(i) Identification of the calendar dates during the calendar quarter reported when average carbon mass feed rates were less than either of the hourly carbon feed rates estimated during mercury or dioxin/furan emissions tests, and the rates recorded. The reasons for such feed rates and a description of the corrective actions taken shall also be reported,

(ii) The total carbon purchased for and delivered to the MWC plant or purchased for and delivered to each MWC unit for the reported calendar quarter, and

(iii) The required usage of carbon for the reported calendar quarter for the MWC plant or for each MWC unit at the plant, calculated using equation 4 or 5 of 40 CFR 60.1935(f); and

(D) The data and results of any CEM quality assurance testing conducted pursuant to this section.

(3) Except as set forth in subparagraph (D) of this subdivision, the MWC owner or operator shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include the following information:

(A) A summary of data collected for each pollutant regulated under this section and all applicable parameters, as follows:

(i) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxin/furan, hydrogen chloride and fugitive ash emission levels achieved during all initial and annual performance tests. Dioxin/furan emissions shall be reported as required in subdivision (1)(B) of this subsection,

(ii) A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device inlet temperature based on the data recorded for 24-hour daily geometric averages, 24-hour daily averages, or 4-hour block averages, as applicable, for the aforementioned pollutants,

(iii) The highest six-minute average opacity level measured,

(iv) The relationship between carbon dioxide and oxygen, if such relationship is reestablished, including test results, identification of the units tested and the date and time of each test run, and, as necessary, a schedule for making the appropriate modifications to the CEM system to incorporate the equivalent % CO_2 correction factor,

(v) The total number of days that the minimum number of hours of data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, particulate matter control device temperature and, as applicable, carbon mass feed rate were not obtained, and

(vi) The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, particulate matter control device temperature and, as applicable, carbon mass feed rate were excluded from the calculation of average emission concentrations or parameters;

(B) The information required by subparagraphs (A)(i), (A)(ii) and (A)(iii) of this subdivision for the previous calendar year; and

(C) The data summaries required by subparagraphs (A) and (B) of this subdivision shall highlight any emission or parameter levels that did not achieve the emission or parameter limits specified under this section.

(4) At least ninety (90) days before any MWC owner or operator plans to conduct any performance test required under this subsection, such owner or operator shall submit a performance test plan for review and written approval of the commissioner. Such plan shall contain, at a minimum, the following information:

(A) sampling locations;

(B) test methods;

(C) sampling protocols;

(D) sample analysis procedures; and

(E) any other information required by the commissioner.

(5) The MWC owner or operator shall provide written notification to the commissioner three (3) business days prior to conducting any performance test required under this subsection.

(6) The MWC owner or operator shall provide written notification to the commissioner within seventy-two (72) hours of the time at which such owner or operator receives information regarding performance test results indicating that any particulate matter, opacity, cadmium, lead, mercury, dioxin/furan, hydrogen chloride or fugitive

ash emission levels exceed the applicable pollutant emission limits or standards defined in this section.

(7) Any report required to be submitted to the commissioner by this section shall include a certification signed in accordance with section 22a-174-2a(a)(4) of the Regulations of Connecticut State Agencies.

(8) The MWC owner or operator shall submit all reports and notifications required by this subsection on forms furnished or prescribed by the commissioner.

(9) The MWC owner or operator shall submit all reports specified under this subsection as a paper copy, with supporting data in either paper or electronic format, postmarked on or before the submittal dates specified in this subsection, and maintain such reports at the premises as a paper copy with any supporting data in the format submitted for a period of five (5) years from the date of submission to the commissioner.

(m) **Duty to comply.**

(1) The owner or operator of a MWC subject to this section who is unable to comply with the requirements of this section shall, at the discretion of the commissioner, enter into a legally enforceable cease operation agreement with the commissioner. The cease operation agreement shall specify a date, no later than one year from the date that the inability to comply is discovered, by which operations shall cease.

(2) Nothing in this section shall limit the commissioner's authority to impose further restrictions or requirements in a permit issued to the owner or operator of a MWC unit.

(Adopted effective June 28, 1999; amended October 26, 2000, February 2, 2004, April 1, 2004, July 7, 2008, February 1, 2010)

Sec. 22a-174-39. Reserved

Sec. 22a-174-40. Consumer products

(a) **Definitions.** For purposes of this section, the definitions listed in this subsection shall apply.

(1) ''Adhesive'' means any product that is applied for the purpose of bonding two surfaces together excluding (1) mechanical means such as screws, clamps and Velcro, (2) products used on humans and animals, and (3) adhesive tape, contact paper, wallpaper, shelf liners or any other product with an adhesive incorporated onto or in an inert substrate.

(2) ''Adhesive remover'' means a product designed to remove adhesives from either a specific substrate or a variety of substrates. ''Adhesive removers'' do not include products that remove adhesives and are intended for use on humans or other animals. For the purpose of this definition, ''adhesive'' means a substance used to bond one or more materials including, but not limited to, caulks, sealants or glues.

(3) ''Aerosol adhesive'' means an aerosolized bonding product in which the spray mechanism is permanently housed in a non-refillable can designed for hand-held application without the need for ancillary hoses or spray equipment.

(4) ''Aerosol cooking spray'' means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food or both.

(5) ''Aerosol product'' means a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product or a product's container, or by means of a mechanically induced force. ''Aerosol product'' does not include pump spray.

(6) ''Agricultural use'' means, for the purposes of this definition, the use of any pesticide or method or device for the control of pests in connection with the commer-

cial production, storage or processing of any animal or plant crop, exclusive of the sale or use of pesticides in properly labeled packages or containers that are intended for use in:

(A) A household or its immediate environment;

(B) Structural pest control, which includes a use requiring a license under section 22a-54 of the Connecticut General Statutes;

(C) A manufacturing, mining or chemical process or in the operation of factories, processing plants and similar sites; or

(D) Within the lines of, or on property necessary for the operation of, buildings such as hospitals, schools, libraries, auditoriums and office complexes.

(7) ''Air freshener'' means any consumer product including, but not limited to, sprays, wicks, powders and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting or deodorizing the air including spray disinfectants and other products that are expressly represented for use as ''air freshener.'' ''Air freshener'' does not include products that are used on the human body, products that function primarily as cleaning products, disinfectant products claiming to deodorize by killing germs on surfaces, institutional and industrial disinfectants when offered for sale solely through institutional and industrial channels of distribution or toilet/urinal care products.

(8) ''All other forms'' means all consumer product forms for which no form-specific VOC standard is specified. Unless specified in a VOC standard, ''all other forms'' include, but are not limited to, solids, liquids, wicks, powders, crystals and cloth, paper wipes or towelettes.

(9) ''Alternative control plan'' or ''ACP'' means an emissions averaging program approved by CARB or the NYSDEC.

(10) ''Anti-microbial hand or body cleaner or soap'' means a cleaner or soap designed to reduce the level of microorganisms on the skin through germicidal activity, including, but not limited to, anti-microbial hand or body washes and cleaners, food-handler hand washes, healthcare personnel hand washes, pre-operative skin preparations and surgical scrubs. ''Anti-microbial hand or body cleaner or soap'' does not include prescription drug products; antiperspirants; astringent or toner; deodorant; facial cleaner or soap; general-use hand or body cleaner or soap; hand dishwashing detergent including anti-microbial, heavy-duty hand cleaner or soap; medicated astringent or medicated toner; or rubbing alcohol.

(11) ''Antiperspirant'' means any product including, but not limited to, an aerosol, roll-on, stick, pump, pad, cream or squeeze-bottle that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population.

(12) ''Anti-static product'' means a product that is labeled to eliminate, prevent or inhibit the accumulation of static electricity, exclusive of electronic cleaners, floor polish or wax, floor coating, aerosol coating products or architectural coating.

(13) ''Architectural coating'' means, notwithstanding the definition in section 22a-174-1 of the Regulations of Connecticut State Agencies, a coating applied to stationary structures and their appurtenances, to mobile homes, to pavements or to curbs.

(14) ''ASTM'' means the American Society for Testing and Materials.

(15) ''Astringent'' or ''toner'' means any product not regulated as a drug by the United States Food and Drug Administration that is applied to the skin for the purpose of cleaning or tightening pores, including clarifiers and substrate-impreg-

nated products and excluding any hand, face or body cleaner or soap product, medicated astringent or medicated toner, cold cream, lotion or antiperspirant.

(16) ''Automotive brake cleaner'' means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

(17) ''Automotive hard paste wax'' means a motor vehicle wax or polish that is:

(A) Designed to protect and improve the appearance of motor vehicle painted surfaces;

(B) A solid at room temperature; and

(C) Contains 0% water by formulation.

(18) ''Automotive instant detailer'' means a product designed for use in a pump spray that is applied to motor vehicle painted surfaces and wiped off prior to being allowed to dry.

(19) ''Automotive rubbing or polishing compound'' means a product designed primarily to remove oxidation, old paint, scratches or swirl marks and other defects from motor vehicle painted surfaces without leaving a protective barrier.

(20) ''Automotive wax, polish, sealant or glaze'' means a product designed to seal out moisture, increase gloss or otherwise enhance motor vehicle painted surfaces including, but not limited to, products designed for use in auto body repair shops and drive-through car washes, as well as products designed for the general public and excluding automotive rubbing or polishing compounds, automotive wash and wax products, surfactant-containing car wash products and products designed for use on unpainted surfaces such as bare metal, chrome, glass or plastic.

(21) ''Automotive windshield washer fluid'' means any liquid designed for use in a motor vehicle windshield washer system either as antifreeze or for the purpose of cleaning, washing or wetting the windshield, excluding fluids placed by the manufacturer in a new vehicle and excluding wet towel products designed to be applied by hand to automotive windshields and windows to remove dirt.

(22) ''Bait station insecticide'' means an insecticidal bait weighing no more than 0.5 ounce and composed of solid material feeding stimulants with less than five percent active ingredients that is designed to be ingested by insects.

(23) ''Bathroom and tile cleaner'' means a product designed to clean tile or surfaces in bathrooms, exclusive of products specifically designed primarily to clean toilet bowls, toilet tanks or urinals.

(24) ''Bug and tar remover'' means a product labeled to remove either or both of the following from painted motor vehicle surfaces without causing damage to the motor vehicle finish:

(A) Biological-type residues such as insect carcasses and tree sap; or

(B) Road grime, such as road tar, roadway paint markings and asphalt.

(25) ''CARB'' means the California Air Resources Board.

(26) ''CCR'' means the California Code of Regulations.

(27) ''Carburetor or fuel-injection air intake cleaners'' means a product designed to remove fuel deposits, dirt or other contaminants from a carburetor, choke, throttle body of a fuel-injection system or associated linkages, exclusive of a product designed exclusively to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors.

(28) ''Carpet and upholstery cleaner'' means a cleaning product designed for the purpose of eliminating dirt and stains on rugs, carpeting, and the interior of motor vehicles or on household furniture or objects upholstered or covered with fabrics such as wool, cotton, nylon or other synthetic fabrics including, but not limited to,

products that make fabric protectant claims and excluding general purpose cleaners, spot removers, vinyl or leather cleaners, dry cleaning fluids or products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.

(29) ''CAS'' means Chemical Abstract Service.

(30) ''Charcoal lighter material'' means any combustible material designed to be applied on, incorporated in, added to or used with charcoal to enhance ignition, excluding electrical starters and probes, metallic cylinders using paper tinder, natural gas, propane or fat wood.

(31) ''Colorant'' means any pigment or coloring material used in a consumer product for an aesthetic effect, or to highlight a component.

(32) ''Connecticut sales'' means the annual sales in Connecticut during a specified calendar year of a consumer product, expressed as net pounds of product less packaging and container.

(33) ''Construction, panel and floor covering adhesive'' means any single-component adhesive that is not floor seam sealer and that is designed exclusively for the installation, remodeling, maintenance or repair of:

(A) Structural and building components that include, but are not limited to, beams, trusses, studs; paneling such as drywall or drywall laminates, fiberglass-reinforced plastic, plywood, particle board, insulation board, pre-decorated hardboard and tile board; ceiling and acoustical tile; molding; fixtures; countertops or countertop laminates; cove or wall bases; and flooring or subflooring; or

(B) Floor or wall coverings that include, but are not limited to, wood or simulated wood covering; carpet; carpet pad or cushion; vinyl-backed carpet; flexible flooring material; non-resilient flooring material; mirror tiles and other types of tiles; and artificial grass.

(34) ''Consumer'' means any person who purchases or acquires any consumer product for personal, family, household or institutional use. A person acquiring a consumer product for resale is not a ''consumer'' for that product.

(35) ''Consumer product'' means a chemically formulated product used by household and institutional consumers including, but not limited to, antiperspirants; detergents; deodorants; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn and garden products; disinfectants; sanitizers; aerosol paints; or automotive specialty products. Other paint products, furniture coatings or architectural coatings are not ''consumer products.''

(36) ''Contact adhesive'' means an adhesive that:

(A) Is designed for application to two surfaces to be bonded together;

(B) Is designed to dry before the two surfaces are placed in contact with each other;

(C) Forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other;

(D) Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces;

(E) Is not a rubber cement primarily intended for use on paper substrates; and

(F) Is not a vulcanizing fluid designed and labeled for tire repair.

(37) ''Contact adhesive -- general purpose'' means any contact adhesive that is not a ''contact adhesive -- special purpose.''

(38) ''Contact adhesive -- special purpose'' means a contact adhesive that is either:

(A) Used to bond melamine-covered board, unprimed metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber, high pressure laminate

or wood veneer 1/16 inch or less in thickness to any porous or nonporous surface, and is sold in units of product, less packaging, that contain more than eight fluid ounces; or

(B) Used in automotive applications that are either automotive under-the-hood applications requiring heat, oil or gasoline resistance, or body-side molding, automotive weatherstrip or decorative trim.

(39) ''Container'' or ''packaging'' means the part or parts of a consumer or institutional product that serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances that accomplish the purpose or purposes for which the product is designed or intended, and includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached.

(40) ''Crawling bug insecticide'' means any insecticide product that is designed for use against ants, cockroaches or other household crawling arthropods including, but not limited to, mites, silverfish or spiders, and excluding any house dust mite product or any product designed to be used exclusively on humans or animals. For the purposes of this definition only:

(A) ''House dust mite'' means a Pyroglyphidaean mite that feeds primarily on skin cells shed in the home by humans and pets; and

(B) ''House dust mite product'' means a product whose label, packaging or accompanying literature states that the product is suitable for use against house dust mites but does not indicate that the product is suitable for use against ants, cockroaches or other household crawling arthropods.

(41) ''Date-code'' means the day, month and year on which a consumer product is manufactured, filled or packaged or a code indicating such a date.

(42) ''Deodorant'' means any product including, but not limited to, an aerosol, roll-on, stick, pump, pad, cream or squeeze-bottle, that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria that cause the decomposition of perspiration.

(43) ''Device'' means any instrument or contrivance, other than a firearm, designed for trapping, destroying, repelling or mitigating any pest or any other form of plant or animal life other than humans and bacteria, viruses or other microorganisms on or in living humans or other living animals; but ''device'' does not include equipment used to apply pesticides if such pesticides are sold separately from the device.

(44) ''Disinfectant'' means any product intended to destroy or inactivate infectious or other undesirable bacteria, pathogenic fungi or viruses on surfaces or inanimate objects and for which the label is registered under FIFRA. ''Disinfectant'' does not include products:

(A) Designed solely for use on human or animals;

(B) Designed for agricultural use;

(C) Designed solely for use in swimming pools, therapeutic tubs or hot tubs; or

(D) As indicated on the principal display panel or label, designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners or metal polishes.

(45) ''Distributor'' means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers and consumers are not ''distributors.''

(46) ''Double-phase aerosol air freshener'' means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

(47) ''Dry cleaning fluid'' means any non-aqueous liquid product designed and labeled exclusively for use on fabrics that are labeled ''dry clean only'' or that are S-coded fabrics and includes, but is not limited to, those products used by commercial dry cleaners and commercial businesses that clean fabrics such as draperies at the customer's residence or work place. ''Dry cleaning fluid'' does not include spot remover or carpet and upholstery cleaner.

(48) ''Dusting aid'' means a product designed for use with a mop, rag or other dusting device to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating and does not include products that consist entirely of compressed gases for use in electronic or other specialty areas.

(49) ''Electrical cleaner'' means a product labeled to remove heavy soils such as grease, grime or oil from electrical equipment such as electric motors, armatures, relays, electric panels or generators. ''Electrical cleaner'' does not include general purpose cleaner, general purpose degreaser, dusting aid, electronic cleaner, energized electrical cleaner, pressurized gas duster, engine degreaser, anti-static product or products designed to clean the casings or housings of electrical equipment.

(50) ''Electronic cleaner'' means a product labeled for the removal of dirt, moisture, dust, flux or oxides from the internal components of electronic or precision equipment such as circuit boards, and the internal components of electronic devices such as radios, compact disc (CD) players, digital video disc (DVD) players and computers. ''Electronic cleaner'' does not include general purpose cleaner, general purpose degreaser, dusting aid, pressurized gas duster, engine degreaser, electrical cleaner, energized electrical cleaner, anti-static product or products designed to clean the casings or housings of electronic equipment.

(51) ''Energized electrical cleaner'' means a product that meets both of the following criteria: (1) the product is labeled to clean or degrease electrical equipment, where cleaning or degreasing is accomplished when electrical current exists, or when there is a residual electrical potential from a component, such as a capacitor; and (2) the product label clearly displays the statements: **''Energized equipment use only. Not to be used for motorized vehicle maintenance or their parts.''** ''Energized electrical cleaner'' does not include electronic cleaner.

(52) ''Engine degreaser'' means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.

(53) ''Fabric protectant'' means a product designed to be applied to fabric substrates to protect the surface from soiling or to reduce absorption of liquid into the fabric's fibers. ''Fabric protectant'' does not include a product labeled for use as a waterproofer, a product designed for use solely on leather or a product designed for use solely on fabrics that are labeled ''dry clean only'' and sold in containers of ten fluid ounces or less.

(54) ''Fabric refresher'' means a product labeled to neutralize or eliminate odors on non-laundered fabric including, but not limited to, soft household surfaces, rugs, carpeting, draperies, bedding, automotive interiors, footwear, athletic equipment, clothing or on household furniture or objects upholstered or covered with fabrics such as, but not limited to, wool, cotton or nylon. ''Fabric refresher'' does not include anti-static product, carpet and upholstery cleaner, soft household surface

sanitizers, footwear or leather care product, spot remover or disinfectant, or products labeled for application on both fabric and human skin. For the purposes of this definition only, ''soft household surface sanitizer'' means a product labeled to neutralize or eliminate odors on the surfaces listed in this definition and for which the label is registered as a sanitizer under FIFRA.

(55) ''Facial cleaner or soap'' means a cleaner or soap designed primarily to clean the face and includes, but is not limited to, facial cleansing creams, semi-solids, liquids, lotions and substrate-impregnated forms; and excludes prescription drug products, antimicrobial hand or body cleaner or soap, astringent, toner, general-use hand or body cleaner or soap, medicated astringent, medicated toner or rubbing alcohol.

(56) ''Fat wood'' means pieces of wood kindling with high levels of sap or resin that enhance ignition of the kindling, and excludes any kindling with substances added to enhance flammability, such as wax-covered or wax-impregnated wood-based products.

(57) ''FDA'' means the United States Food and Drug Administration.

(58) ''FIFRA'' means the Federal Insecticide, Fungicide and Rodenticide Act, 7 USC sections 136 et. seq.

(59) ''Flea and tick insecticide'' means any insecticide product that is designed for use against fleas, ticks, their larvae or their eggs, exclusive of products designed for use exclusively on humans or animals and their bedding.

(60) ''Flexible flooring material'' means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl or vinyl composite flooring.

(61) ''Floor coating'' means an opaque coating that is labeled and designed for application to flooring, including but not limited to, decks, porches, steps or other horizontal surfaces subject to foot traffic.

(62) ''Floor or wall covering adhesive remover'' means a product designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate.

(63) ''Floor polish or wax'' means a wax, polish or any other product designed to polish, protect or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished, exclusive of spray buff products, products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors and coatings subject to architectural coatings regulations.

(64) ''Floor seam sealer'' means any product designed and labeled exclusively for bonding, fusing, sealing or coating seams between adjoining pieces of installed flexible sheet flooring.

(65) ''Floor wax stripper'' means a product designed to remove natural or synthetic floor polishes or waxes through breakdown of the polish or wax polymers, or by dissolving or emulsifying the polish or wax, exclusive of aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.

(66) ''Flying bug insecticide'' means any insecticide product that is designed for use against flying insects or other flying arthropods, including, but not limited to, flies, mosquitoes, moths or gnats, and excluding wasp and hornet insecticide, products that are designed to be used exclusively on humans or animals or any moth-proofing product. For the purposes of this definition only, ''moth-proofing product'' means a product whose label, packaging or accompanying literature indicates that the product is designed to protect fabrics from damage by moths but does not indicate that the product is suitable for use against flying insects or other flying arthropods.

(67) ''Footwear or leather care product'' means any product designed or labeled to be applied to footwear or to other leather articles or components, to maintain, enhance, clean, protect or modify the appearance, durability, fit or flexibility of the footwear or leather article or component. Footwear includes both leather and non-leather foot apparel. ''Footwear or leather care product'' does not include fabric protectant, general purpose adhesive, contact adhesive, vinyl/fabric/leather/polycarbonate coating, rubber and vinyl protectant, fabric refresher, products solely for deodorizing or sealant products with adhesive properties used to create external protective layers greater than two millimeters thick.

(68) ''Fragrance'' means a substance or complex mixture of aroma chemicals, natural essential oils and other functional components, the sole purpose of which is to impart an odor or scent or to counteract a malodor.

(69) ''Furniture coating'' means any paint designed for application to room furnishings including, but not limited to, kitchen, bath and vanity cabinets; tables; chairs; beds and sofas.

(70) ''Furniture maintenance product'' means a wax, polish, conditioner or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors but does not include dusting aids, wood cleaners, products designed solely for the purpose of cleaning and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

(71) ''Gasket or thread locking adhesive remover'' means a product designed or labeled to remove gaskets or thread locking adhesives. ''Gasket or thread locking adhesive remover'' includes products labeled for dual use as a paint stripper and gasket remover or thread locking adhesive remover.

(72) ''Gel'' means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

(73) ''General purpose adhesive'' means any non-aerosol adhesive designed for use on a variety of substrates, excluding the following:

(A) Contact adhesives;

(B) Construction, panel and floor covering adhesives;

(C) Adhesives designed exclusively for application to one specific category of substrate, such as metals, paper products, ceramics, plastics, rubbers or vinyls; or

(D) Adhesives designed exclusively for use on one specific category of articles that may be composed of different materials but perform a specific function, such as gaskets, automotive trim, weather-stripping or carpets.

(74) ''General purpose adhesive remover'' means a product designed or labeled to remove cyanoacrylate adhesives and non-reactive adhesives or residue from a variety of substrates. ''General purpose adhesive remover'' does not include floor or wall covering adhesive remover.

(75) ''General purpose cleaner'' means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. ''General purpose cleaner'' includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces and does not include general purpose degreasers and electronic cleaners.

(76) ''General purpose degreaser'' means any product labeled to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts. ''General purpose degreaser'' does not include engine degreaser, general purpose cleaner, adhesive remover, electronic cleaner, electrical cleaner, energized electrical cleaner, metal

polish, metal cleanser, products used exclusively in solvent cleaning tanks or related equipment, or products that are:

(A) Sold exclusively to establishments that manufacture or construct goods or commodities; and

(B) Labeled **''not for retail sale.''**

(77) ''General-use hand or body cleaner or soap'' means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. ''General-use hand or body cleaner or soap'' includes, but is not limited to, hand or body wash, dual-purpose shampoo-body cleaner, shower or bath gel and moisturizing cleaner or soap; and excludes prescription drug product, anti-microbial hand or body cleaner or soap, astringent, toner, facial cleaner or soap, hand dishwashing detergent, anti-microbial hand washing detergent, heavy-duty hand cleaner or soap, medicated astringent, medicated toner or rubbing alcohol.

(78) ''Glass cleaner'' means a cleaning product designed primarily for cleaning surfaces made of glass and does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment or photocopying machines.

(79) ''Graffiti remover'' means a product labeled to remove spray paint, ink, marker, crayon, lipstick, nail polish or shoe polish from a variety of non-cloth or non-fabric substrates. ''Graffiti remover'' does not include paint remover or stripper, nail polish remover or spot remover. ''Graffiti remover'' includes products labeled for dual use as both a paint stripper and graffiti remover.

(80) ''Hair mousse'' means hairstyling foam designed to facilitate styling of a coiffure and provide holding power.

(81) ''Hair shine'' means any product designed for the primary purpose of creating a shine when applied to the hair, including, but not limited to, dual-use hair styling product, products designed primarily to impart a sheen to the hair, and excluding hair spray, hair mousse, hair styling gel or spray gel, or products whose primary purpose is to condition or hold the hair.

(82) ''Hair spray'' means a consumer product that is applied to styled hair and is designed or labeled to provide sufficient rigidity to hold, retain or finish the style of the hair for a period of time. ''Hair spray'' includes aerosol hair sprays, pump hair sprays, spray waxes; color, glitter or sparkle hairsprays that make finishing claims; and products that are both a styling and finishing product. ''Hair spray'' does not include spray products that are intended to aid in styling but do not provide finishing of a hairstyle. For the purposes of this definition, ''finish'' or ''finishing'' means the maintaining or holding of previously styled hair for a period of time. For the purposes of this definition, ''styling'' means the forming, sculpting or manipulation of the hair to alter temporarily the hair's shape.

(83) ''Hair styling product'' means a consumer product designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling or sculpting of the hair. ''Hair styling product'' includes, but is not limited to, hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hairstyle and leave-in volumizers, detanglers or conditioners that make styling claims. ''Hair styling product'' does not include hair mousse, hair shine, hair spray or shampoos or conditioners that are rinsed from the hair prior to styling. For the purposes of this definition, ''finish'' or ''finishing'' means the maintaining or holding of previously styled hair for a period of time; and ''styling'' means the forming, sculpting or manipulation of the hair to alter temporarily the hair's shape.

(84) ''Heavy-duty hand cleaner or soap'' means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, putty, printer's ink, paint, graphite, cement, carbon, asphalt or adhesives from the hand with or without the use of water. ''Heavy-duty hand cleaner or soap'' does not include prescription drug product, anti-microbial hand or body cleaner or soap, astringent, toner, facial cleaner or soap, general-use hand or body cleaner or soap, medicated astringent, medicated toner or rubbing alcohol.

(85) ''Herbicide'' means a pesticide product designed to kill or retard a plant's growth, but excludes a product labeled for agricultural use and restricted material requiring a permit for use and possession.

(86) ''High volatility organic compound'' or ''HVOC'' means any VOC that exerts a vapor pressure greater than 80mm Hg at 20°C.

(87) ''Household product'' means any consumer product designed for use inside or outside living quarters or residences, inclusive of the immediate surroundings, which are occupied or intended for occupation by individuals.

(88) ''Insecticide'' means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are:

(A) For agricultural use;

(B) For a use which requires a structural pest control license pursuant to section 22a-54 of the Connecticut General Statutes; or

(C) Restricted materials that require a permit for use and possession.

(89) ''Insecticide fogger'' means any insecticide product designed to release all or most of its content, in the form of a fog or mist, into indoor areas during a single application.

(90) ''Institutional product'' or ''industrial and institutional product'' means a consumer product that is designed for use in the maintenance or operation of an establishment, exclusive of a household product or a product that is incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment. For the purpose of this definition, an ''establishment'' includes, but is not limited to, a government agency, factory, school, hospital, sanitarium, prison, restaurant, hotel, store, automobile service and parts center, health club, theater or transportation company, that:

(A) Manufactures, transports, or sells goods or commodities or provides services for profit; or

(B) Is engaged in the nonprofit promotion of a particular public, educational or charitable cause.

(91) ''Label'' means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product or consumer product package, for purposes of branding, identifying or giving information with respect to the product or to the contents of the package.

(92) ''Laundry prewash'' means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents or provides specialized performance.

(93) ''Laundry starch product'' means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp look that may also act to help ease ironing of the fabric. ''Laundry starch product'' includes, but is not limited to, fabric finish, sizing and starch.

(94) ''Lawn and garden insecticide'' means an insecticide product labeled primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.

(95) ''Liquid'' means a substance or mixture of substances that is capable of a visually detectable flow as determined under ASTM D-4359-90, excluding powders or other materials composed entirely of solid particles.

(96) ''Lubricant'' means a product designed to reduce friction, heat, noise or wear between moving parts, or to loosen rusted or immovable parts or mechanisms and excludes the following products:

(A) Automotive power steering fluids;

(B) Products for use inside power generating motors, engines, and turbines and associated power-transfer gearboxes;

(C) Two cycle oils or other products designed to be added to fuels;

(D) Products for use on the human body or animals; or

(E) Products that are both:

(i) Sold exclusively to establishments that manufacture or construct goods or commodities, and

(ii) Labeled **''not for retail sale.''**

(97) ''LVP-VOC'' means a low vapor pressure chemical compound or mixture that contains at least one carbon atom and meets at least one of the following criteria:

(A) Has a vapor pressure less than 0.1 mm Hg at 20°C;

(B) Is a chemical compound with more than 12 carbon atoms or a chemical mixture comprised solely of compounds with more than 12 carbon atoms, and the vapor pressure and boiling point are unknown;

(C) Is a chemical compound with a boiling point greater than 216°C; or

(D) Is the weight percent of a chemical mixture that boils above 216°C.

For the purposes of this definition, ''chemical compound'' means a molecule of definite chemical formula and isomeric structure, and ''chemical mixture'' means a substrate comprised of two or more chemical compounds.

(98) ''Manufacturer'' means any person who imports, manufactures, assembles, produces, packages, repackages or re-labels a consumer product.

(99) ''Medicated astringent'' or ''medicated toner'' means any product regulated as a drug by the FDA that is applied to the skin for the purpose of cleaning or tightening pores, and includes, but is not limited to, clarifiers and substrate-impregnated products. ''Medicated astringent'' or ''medicated toner'' does not include hand, face, or body cleaner or soap products, astringent or toner, cold cream, lotion, antiperspirants or products that must be purchased with a doctor's prescription.

(100) ''Medium volatility organic compound'' or ''MVOC'' means any volatile organic compound that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20°C.

(101) ''Metal polish/cleanser'' means any product designed to use physical or chemical action to remove or reduce stains, impurities or oxidation from surfaces or to make surfaces smooth and shiny on finished metal, metallic or metallized surfaces. ''Metal polish/cleanser'' includes, but is not limited to, metal polishes used on brass, silver, chrome, copper, stainless steel and other ornamental metals and does not include: automotive wax, polish, sealant or glaze; wheel cleaner; paint remover or stripper; products designed and labeled exclusively for automotive and marine detailing; or products designed for use in degreasing tanks.

(102) ''Mist spray adhesive'' means any aerosol adhesive that is not a special purpose spray adhesive and that delivers a particle or mist spray, resulting in the formation of fine, discrete particles that yield a generally uniform and smooth application of adhesive to the substrate.

(103) ''Multi-purpose dry lubricant'' means any lubricant that is:

(A) Designed and labeled to provide lubricity by depositing a thin film of graphite, molybdenum disulfide (''moly''), or polytetrafluoroethylene or closely related fluoropolymer (''Teflon'') on surfaces; and

(B) Designed for general purpose lubrication, or for use in a wide variety of applications.

(104) ''Multi-purpose lubricant'' means any lubricant designed for general purpose lubrication or for use in a wide variety of applications, exclusive of any multi-purpose dry lubricant, penetrant or silicone-based multi-purpose lubricant.

(105) ''Multi-purpose solvent'' means any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning, dispersing or dissolving other organic materials, including solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories. ''Multi-purpose solvents'' do not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

(106) ''Nail polish'' means any clear or colored coating designed for application to the fingernails or toenails and including, but not limited to, lacquers, enamels, acrylics, base coats and top coats.

(107) ''Nail polish remover'' means a product designed to remove nail polish and coatings from fingernails or toenails.

(108) ''Non-aerosol product'' means any consumer product that is not dispensed by a pressurized spray system.

(109) ''Non-carbon containing compound'' means any compound that does not contain carbon atoms.

(110) ''Non-resilient flooring'' means flooring of a mineral content that is not flexible, including terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

(111) ''Non-selective terrestrial herbicide'' means a herbicide product that is intended for use on land and is toxic to plants without regard to species.

(112) ''NYCRR'' means the Official Compilation of Codes, Rules and Regulations of the State of New York.

(113) ''NYSDEC'' means the New York State Department of Environmental Conservation.

(114) ''Oven cleaner'' means any cleaning product designed to clean by removing dried food and other deposits from oven interiors.

(115) ''Paint'' means any pigmented liquid, liquefiable or mastic composition designed for application to a substrate in a thin layer, which is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.

(116) ''Paint remover or stripper'' means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. ''Paint remover or stripper'' does not include:

(A) Multi-purpose solvents;

(B) Paint brush cleaners;

(C) Products designed and labeled exclusively to remove graffiti; or

(D) Hand cleaner products that claim to remove paints and other related coating from skin.

(117) ''Penetrant'' means a lubricant designed and labeled primarily to loosen metal parts that have bonded together due to rusting, oxidation or other causes.

(118) ''Pesticide'' means any substance or mixture of substances labeled, designed or intended for use in preventing, destroying, repelling or mitigating any pest; or any substance or mixture of substances labeled, designed or intended for use as a defoliant, desiccant or plant regulator; and excluding any substance, mixture of substances or device that the United States Environmental Protection Agency does not consider a pesticide.

(119) ''Pressurized gas duster'' means a pressurized product labeled to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards and other types of surfaces that cannot be cleaned with solvents. ''Pressurized gas duster'' does not include dusting aids.

(120) ''Principal display panel'' means that part, or those parts, of a product label appearing once or more on a container or packaging that is designed for display to, examination by or presentation to a potential consumer under normal and customary conditions of display or purchase.

(121) ''Product brand name'' means the name of the product exactly as it appears on the principal display panel of the product.

(122) ''Product form'' means the form that most accurately describes a products' dispensing form, including aerosols, solids, semi-solids, liquids and pump sprays.

(123) ''Propellant'' means a liquefied or compressed gas that is used in whole or in part, such as a co-solvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

(124) ''Pump spray'' means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.

(125) ''Responsible party'' means the company, firm or establishment that is listed on a product's label. If the label lists more than one company, firm or establishment, the responsible party is the party that the product was ''manufactured for'' or ''distributed by,'' as noted on the label.

(126) ''Restricted materials'' means pesticides classified for ''restricted use'' pursuant to FIFRA.

(127) ''Retailer'' means any person who sells, supplies or offers consumer products for sale directly to consumers.

(128) ''Retail outlet'' means any establishment at which consumer products are sold, supplied or offered for sale directly to consumers.

(129) ''Roll-on product'' means any antiperspirant or deodorant dispensed by rolling a wetted ball or wetted cylinder on the affected area.

(130) ''Rubber and vinyl protectant'' means any product designed to protect, preserve or renew vinyl, rubber and plastic on motor vehicles, tires, luggage, furniture or household products such as vinyl covers, clothing and accessories. ''Rubber and vinyl protectant'' does not include products primarily designed to clean a motor vehicle wheel rim, such as aluminum or magnesium wheel cleaners, or tire cleaners that do not leave an appearance-enhancing or protective substance on the tire.

(131) ''Rubbing alcohol'' means any product containing isopropyl alcohol or denatured ethanol and labeled for topical use, usually to decrease germs in minor cuts and scrapes, to relieve minor muscle aches, as a rubefacient or for massage.

(132) ''S-coded fabric'' means an upholstery fabric designed to be cleaned only with water-free spot cleaning products as specified by the Joint Industry Fabric Standards and Guidelines Committee.

(133) ''Sealant and caulking compound'' means any product with adhesive properties that is designed to fill, seal, waterproof or weatherproof gaps or joints between two surfaces, and excluding the following products:

(A) Roof cements and roof sealants;

(B) Insulating foams;

(C) Removable caulking compounds, which, for the purposes of this subdivision, means a compound that temporarily seals windows or doors for three to six month time intervals;

(D) Clear/paintable/water resistant caulking compound, which, for the purposes of this subdivision, means a compound that contains no appreciable level of opaque fillers or pigments; transmits most or all visible light through the caulk when cured; is paintable; and is immediately resistant to precipitation upon application;

(E) Floor seam sealers;

(F) Products designed exclusively for automotive uses;

(G) Sealers that are applied as continuous coatings; or

(H) Products sold in units that weigh more than one pound and consist of more than sixteen fluid ounces.

(134) ''Semisolid'' means a product that, at room temperature, will not pour but will spread or deform easily, such as gels, pastes and greases.

(135) ''Shaving cream'' means an aerosol product that dispenses foam lather intended for use with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair. ''Shaving cream'' does not include shaving gel.

(136) ''Shaving gel'' means an aerosol product that dispenses a post-foaming semi-solid designed to be used with a blade, cartridge razor or other wet-shaving system in the removal of facial or other body hair. ''Shaving gel'' does not include shaving cream.

(137) ''Silicone-based multi-purpose lubricant'' means any lubricant that is not a product designed and labeled exclusively to release manufactured products from molds and that is designed and labeled as follows:

(A) To provide lubricity primarily through the use of silicone compounds including, but not limited to, polydimethylsiloxane; and

(B) For general purpose lubrication, or for use in a wide variety of applications.

(138) ''Single-phase aerosol air freshener'' means an aerosol air freshener with the liquid contents in a single homogeneous phase that does not require that the product container be shaken before use.

(139) ''Solid'' means a substance or mixture of substances that, either whole or subdivided as in the case of particles comprising a powder, is not capable of visually detectable flow as determined under ASTM D-4359-90.

(140) ''Solvent cleaning tanks or related equipment'' means, but is not limited to, cold cleaners, vapor degreasers, conveyorized degreasers, film cleaning machines or products designed to clean miscellaneous metallic parts by immersion in a container.

(141) ''Special purpose spray adhesive'' means any of the aerosol adhesives identified in subparagraphs (A) through (G) of this subdivision:

(A) Mounting adhesive, an aerosol adhesive designed to mount photographs, artwork and any other drawn or printed media permanently to a backing without causing discoloration to the artwork;

(B) Automotive engine compartment adhesive, an aerosol adhesive designed for use in motor vehicle under-the-hood applications that require oil and plasticizer resistance as well as high shear strength at temperatures of 200 to 275 degrees F;

(C) Flexible vinyl adhesive, an aerosol adhesive designed to bond a nonrigid polyvinyl chloride plastic with at least five percent, by weight, of plasticizer content to substrates;

(D) Polystyrene foam adhesive, an aerosol adhesive designed to bond polystyrene foam to substrates;

(E) Automotive headliner adhesive, an aerosol adhesive designed to bond together layers in motor vehicle headliners;

(F) Polyolefin adhesive, an aerosol adhesive designed to bond polyolefins to substrates; and

(G) Laminate repair or edgebanding adhesive, an aerosol adhesive designed for:

(i) Touch-up or repair of items laminated with sheet materials consisting of a core material that has been laminated at temperatures exceeding 265 degrees F, and at pressures between 1,000 and 1,400 psi, or

(ii) Touch-up, repair or attachment of edgebanding materials, including but not limited to, other laminates, synthetic marble, veneers, wood molding and decorative metals.

(142) ''Specialty adhesive remover'' means a product designed to remove reactive adhesives from a variety of substrates. For the purposes of this definition, ''reactive adhesives'' include adhesives that require a hardener or catalyst for the bond to be formed, epoxies, urethanes and silicones. ''Specialty adhesive remover'' does not include gasket or thread locking adhesive remover.

(143) ''Spot remover'' means any product labeled to clean localized areas, or remove localized spots or stains on cloth or fabric that does not require subsequent laundering to achieve stain removal. ''Spot remover'' does not include dry cleaning fluid, laundry pre-wash or multi-purpose solvent.

(144) ''Spray buff product'' means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

(145) ''Stick product'' means any antiperspirant or deodorant that contains active ingredients in a solid matrix form and that dispenses the active ingredients by frictional action on the affected area.

(146) ''Structural waterproof adhesive'' means an adhesive with bond lines that are resistant to conditions of continuous immersion in fresh or salt water and that conforms with Federal Specification MMM-A-181D (Type 1, Grade A).

(147) ''Tire sealant and inflator'' means any pressurized product that is designed to inflate and seal a leaking tire for a short period of time.

(148) ''Toilet/urinal care product" means any product designed or labeled to clean or deodorize toilet bowls, toilet tanks or urinals. For the purpose of this definition, ''toilet bowls, toilet tanks and urinals'' include, but are not limited to, toilets or urinals connected to permanent plumbing in buildings and other structures, portable toilets or urinals placed at temporary or remote locations and toilets or urinals in vehicles such as buses, recreational motor homes, boats, ships and aircraft. Bathroom and tile cleaner and general purpose cleaner are not considered ''toilet/urinal care products.''

(149) ''Undercoating'' means any aerosol product including, but not limited to, a rubberized, mastic or asphaltic product designed to impart a protective, non-paint layer to the undercarriage, trunk interior or the firewall of motor vehicles to prevent the formation of rust or to deaden sound.

(150) ''Vinyl/fabric/leather/polycarbonate coating'' means a coating designed and labeled exclusively to coat vinyl, fabric, leather or polycarbonate substrates.

(151) ''VOC content'' means the total weight of volatile organic components in a product expressed as a percentage of the product weight exclusive of the container or packaging.

(152) ''Wasp and hornet insecticide'' means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees and that allows the user to spray from a distance a directed stream or burst at the intended insects or their hiding place.

(153) ''Waterproofer'' means a product that is not a fabric protectant and that is designed and labeled exclusively to repel water from fabric or leather substrates.

(154) ''Wax'' means a material or synthetic thermoplastic substance generally composed of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol, high polymers or plastics, including, but not limited to, substances derived from the secretions of plants and animals such as carnuba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin and synthetic polymers such as polyethylene.

(155) ''Web spray adhesive'' means any aerosol adhesive that is not a mist spray or special purpose spray adhesive.

(156) ''Wood cleaner'' means a product labeled to clean wooden materials including but not limited to decking, fences, flooring, logs, cabinetry and furniture. ''Wood cleaner'' does not include dusting aid, general purpose cleaner, furniture maintenance product, floor wax stripper, floor polish or wax or products designed and labeled exclusively to preserve or color wood.

(157) ''Wood floor wax'' means a wax-based product for use solely on wood floors.

(b) **Applicability.**

Except as provided in subsection (c) of this section, this section applies to any person who, on or after January 1, 2009, sells, supplies, offers for sale or manufactures for sale in the state of Connecticut any consumer product for use in the state of Connecticut.

(c) **Exemptions.**

(1) This section shall not apply to any consumer product manufactured in Connecticut for shipment, sale and use outside of Connecticut.

(2) This section shall not apply to a manufacturer or distributor who sells, supplies or offers for sale in Connecticut a consumer product that does not comply with the VOC content limits specified in Table 40-1 of this section provided that such manufacturer or distributor makes and keeps records demonstrating:

(A) The consumer product is intended for shipment and use outside of Connecticut; and

(B) The manufacturer or distributor has taken reasonable precautions to assure that the consumer product is not distributed to or within Connecticut.

(3) Subdivision (2) of this subsection shall not apply to a consumer product that is sold, supplied or offered for sale by any person to a retail outlet in Connecticut.

(4) This section shall not apply to any product for which the manufacturer obtains one of the following variances, provided that any manufacturer who claims exemption pursuant to this subdivision shall possess and submit to the commissioner, upon request therefor, a copy of the applicable underlying variance decision:

(A) A variance issued by the NYSDEC pursuant to 6 NYCRR 235-8.1, for the period of time such variance is in effect; or

(B) A variance issued by CARB pursuant to 17 CCR 94514, for the period of time such variance is in effect.

(5) This section shall not apply to any product for which the manufacturer is granted one of the following exemptions, provided the consumer product sold in Connecticut meets all product conditions attached to the grant of the exemption:

(A) An exemption by CARB pursuant to the Innovative Products provisions of 17 CCR 94511 or 17 CCR 94503.5 for the period of time the CARB Innovative Products exemption remains in effect; or

(B) An exemption by the NYSDEC pursuant to the Innovative Products provisions of 6 NYCRR 235-5.1 for the period of time the NYSDEC Innovative Products exemption remains in effect.

(6) Any manufacturer who claims an exemption pursuant to subdivision (5) of this subsection shall submit to the commissioner, upon request therefor, a copy of the applicable CARB or NYSDEC exemption decision.

(7) This section shall not apply to any manufacturer for any product that is subject to one of the ACP agreements identified below, provided that the manufacturer complies with all conditions applicable to the underlying ACP agreement:

(A) Exempt by NYSDEC pursuant to the ACP requirements of 6 NYCRR 235-11.1 for the period of time the underlying ACP agreement remains in effect. Any manufacturer who claims exemption pursuant to this subparagraph shall submit to the commissioner and the Administrator, upon request therefor, a copy of the applicable ACP agreement; or

(B) Exempt by CARB pursuant to the ACP requirements of 17 CCR 94511 for the period of time the underlying ACP agreement remains in effect. Any manufacturer who claims exemption pursuant to this subparagraph shall submit to the commissioner and the Administrator, upon request therefor, a copy of the applicable ACP agreement.

(8) The VOC content limits specified for antiperspirants or deodorants in Table 40-1 of this section shall not apply to the following:

(A) Colorants up to a combined level of two percent by weight contained in any antiperspirant or deodorant,

(B) Those VOCs that contain more than ten carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of 2 mm Hg or less at 20°C, and

(C) The MVOC content limits shall not apply to ethanol.

(9) The VOC content limits specified in Table 40-1 of this section shall not apply to fragrances up to a combined level of two percent by weight contained in any consumer product.

(10) The VOC content limits specified in Table 40-1 of this section shall not apply to any LVP-VOC.

(11) For consumer products registered under FIFRA:

(A) The requirements of subsection (e) of this section shall not apply; and

(B) Prior to January 1, 2010, the VOC content limits of this section and additional requirements in subsection (d) shall not apply.

(12) The VOC content limits specified in Table 40-1 of this section shall not apply to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs or exempted under subdivision (10) of this subsection.

(13) The VOC content limits specified in Table 40-1 of this section shall not apply to air fresheners and insecticides containing at least 98 percent paradichlorobenzene.

(14) The VOC content limits specified in Table 40-1 of this section shall not apply to adhesives sold in containers of one fluid ounce or less.

(15) The VOC content limits specified in Table 40-1 of this section shall not apply to bait station insecticides.

(16) The requirements of this section shall not apply to:

(A) Contact adhesives sold in units of product, less packaging, of more than one gallon; or

(B) Construction, panel and floor covering adhesives and general purpose adhesives sold in units of product, less packaging, of more than one pound or sixteen (16) fluid ounces.

(17) The requirements of this section shall not apply to a consumer product that is distributed or transferred by a branch of the United States military to, from or within a premises operated by that branch of the United States military.

(d) **Standards.**

(1) Except as provided in subsection (c) of this section, no person shall sell, supply or offer for sale in the state of Connecticut any consumer product manufactured on or after January 1, 2009 or, on or after January 1, 2009, manufacture for sale in the state of Connecticut any consumer product, unless such consumer product complies with the applicable VOC content limits specified in Table 40-1 of this section and the requirements of this subsection.

(2) For consumer products that are diluted prior to use, the VOC content limits in Table 40-1 shall apply as follows:

(A) If the label, packaging or accompanying literature specify that the product should be diluted with water or non-VOC solvent prior to use, the VOC content limits specified in Table 40-1 shall apply to the product only after the minimum recommended dilution has taken place;

(B) If the label, packaging or accompanying literature specify that the product should be diluted with any VOC solvent prior to use, the VOC content limits specified in Table 40-1 shall apply to the product only after the maximum recommended dilution has taken place; and

(C) For the purposes of this subdivision, ''minimum recommended dilution'' shall not include recommendations for incidental use of a concentrated product for limited special applications such as hard-to-remove soils or stains.

(3) No person shall sell, supply or offer for sale in Connecticut after January 1, 2009 any charcoal lighter material product unless at the time of the transaction, such person possesses documentation showing that such product has been issued a currently effective certification by the CARB pursuant to 17 CCR 94509(h).

(4) No person shall sell, supply, offer for sale or manufacture for use in Connecticut after January 1, 2009 any aerosol adhesive that exceeds the VOC content limits in Table 40-1 of this section for consumer, industrial and commercial uses or that contains methylene chloride, perchloroethylene or trichloroethylene. If an aerosol adhesive:

(A) Is sold as a special purpose spray adhesive, the product label shall indicate that the adhesive is suitable only for substrates and applications identified in the definition of special purpose spray adhesive in subsection (a) of this section. If the product label indicates that the adhesive is suitable for use on any substrate or application that is not identified in definition of special purpose spray adhesive in subsection (a) of this section, then the product shall be classified as either a web spray adhesive or a mist spray adhesive; and

(B) Meets more than one of the classifications for a special purpose spray adhesive as defined in subsection (a) of this section, and the product is not classified as a web spray adhesive or a mist spray adhesive pursuant to subparagraph (A) of this

subdivision, then the VOC content limit for the product shall be the lowest applicable VOC content limit specified in Table 40-1.

(5) On and after January 1, 2009, no person shall:

(A) Sell, supply or offer for sale in the State of Connecticut any contact adhesive, electronic cleaner, footwear or leather care product, general purpose degreaser, adhesive remover, electrical cleaner or graffiti remover manufactured on or after January 1, 2009, if such product contains methylene chloride, perchloroethylene or trichloroethylene, except to the extent such compounds are present as impurities in a combined amount less than or equal to 0.01% by weight; or

(B) Manufacture for sale in the State of Connecticut any contact adhesive, electronic cleaner, footwear or leather care product, general purpose degreaser, adhesive remover, electrical cleaner or graffiti remover, if such product contains methylene chloride, perchloroethylene or trichloroethylene, except to the extent such compounds are present as impurities in a combined amount less than or equal to 0.01% by weight.

(6) No person shall sell, supply, offer for sale or manufacture for use in Connecticut any consumer product for which a standard is specified in subdivision (1) of this subsection if such consumer product contains any of the ozone depleting compounds listed in Table 40-2 of this section, except as follows:

(A) An existing product formulation that complies with the applicable VOC content limits in Table 40-1 of this section or an existing product formulation that is reformulated to meet the applicable VOC content limits in Table 40-1, provided the ozone depleting compound content of the reformulated product does not increase; or

(B) A consumer product in which ozone depleting compounds are present as impurities in an amount equal to or less than 0.01% by weight of the product.

(7) No person shall sell, supply, offer for sale or manufacture for sale in Connecticut any antiperspirant or deodorant that contains any compound that has been identified by CARB in 17 CCR 93000 as a toxic air contaminant.

(8) No person shall sell, supply, offer for sale or manufacture for use in Connecticut any solid air freshener or toilet/urinal care product that contains para-dichlorobenzene.

(9) If a representation is made on the display panel of any consumer product, except a general purpose cleaner, an antiperspirant or a deodorant product, that the product may be used as, or, is suitable for use as, a consumer product for which a lower VOC standard is specified in Table 40-1 of this section, then the lowest VOC standard shall apply.

(10) To determine whether a product is an air freshener, all verbal and visual representations regarding product use on the label or packaging and in the product's literature and advertising may be considered. The presence of, and representations about, a product's fragrance and ability to deodorize resulting from surface application shall not constitute a claim of air freshening.

(e) **Container labeling.**

(1) Each manufacturer of a consumer product subject to subsection (d) of this section shall clearly display on each consumer product container or package, the date on which the product was manufactured or a code indicating such date, as follows:

(A) The date or date-code information shall be readily observable on the container without disassembling the container or packaging; and

(B) The date or date-code shall be displayed on each consumer product container or package no later than January 1, 2008.

(2) No person shall erase, alter, deface or otherwise remove or make illegible any date or date-code from any regulated product container prior to final sale of the product without the express authorization of the manufacturer. The requirements of this subdivision shall not apply to products containing no VOCs or containing VOCs at 0.10% by weight or less.

(3) If a manufacturer uses a code indicating the date of manufacture for any consumer product subject to subsection (d) of this section, an explanation of the code must be available to the commissioner upon request no later than January 1, 2008.

(4) On and after January 1, 2009, the product container for any aerosol adhesive product subject to this section shall display the following information:

(A) The aerosol adhesive category as specified in Table 40-1 or an abbreviation of the category;

(B) The applicable VOC standard for the product that is specified in Table 40-1, expressed as a percent by weight; and

(C) If the product is classified as a special purpose spray adhesive, the applicable substrate, the application or an abbreviation of the substrate or application that qualifies the product as special purpose.

(5) On and after January 1, 2009, no person shall sell, supply, offer for sale or manufacture for sale in Connecticut any non-aerosol floor wax stripper subject to this section unless the following requirements are met:

(A) The label shall specify a dilution ratio for light or medium build-up of polish that results in an as-used VOC concentration of three percent (3%) by weight or less, but the terms ''light build-up'' and ''medium build-up'' may or may not appear on the label; and

(B) If intended for removal of heavy build-up of polish, the label shall specify a dilution ratio for heavy build-up of polish that results in an as-used VOC concentration of twelve percent (12%) by weight or less, but the term ''heavy build-up'' may or may not appear on the label.

(6) On and after January 1, 2009, the product container for any adhesive remover, electronic cleaner, electrical cleaner or contact adhesive product subject to this section shall display the following information:

(A) The product category as specified in Table 40-1 or an abbreviation of the category; and

(B) The applicable VOC standard for the product that is specified in Table 40-1, expressed as a percent by weight.

(f) **Compliance procedures and testing.**

(1) Any person who sells, supplies, offers for sale or manufactures a consumer product on or after January 1, 2009 for sale in Connecticut shall possess documentation that such consumer product was tested to determine compliance with the applicable VOC content limits in Table 40-1 of this section prior to being offered for sale in Connecticut.

(2) Testing as required by subdivision (1) of this subsection shall use one of the following test methods:

(A) CARB Method 310, Determination of Volatile Organic Compound (VOC) in Consumer Products, as adopted by CARB on September 25, 1997, and as in effect on the effective date of this section;

(B) Product formulation and records pursuant to subdivision (3) of this subsection;

(C) An alternative method approved by the NYSDEC pursuant to 6 NYCRR 235-9.1 as in effect on the effective date of this section; or

(D) An alternative method approved by the commissioner that accurately determines the concentration of VOCs in a consumer product or its emissions.

(3) VOC content calculated from product formulation and records shall use the following equation:

$$\text{VOC Content} = \frac{B-C}{A} \times 100$$

Where:

A = total weight of unit (excluding container and packaging).
B = total weight of all VOCs per unit.
C = total weight of VOCs exempted by this section, per unit.

(4) If a compliance determination made using product records pursuant to subdivision (2)(B) of this subsection appears to demonstrate compliance with the VOC content limits, but such determination is contradicted by product testing performed pursuant to subdivision (2)(A) of this subsection, the results of the demonstration made pursuant to subdivision (2)(A) shall take precedence over the demonstration made pursuant to subdivision (2)(B) and may be used to establish a violation of the requirements of this section.

(5) If any consumer product testing in accordance with this subsection requires determination of whether a product is a liquid or a solid, the determination shall be made using ASTM D4359-90, May 25, 1990.

(6) Any flexible vinyl adhesive determination of plasticizer shall be made using ASTM E260-96 ''Standard Practice for Packed Column Gas Chromotography,'' as re-approved in 2001.

(7) Testing to determine compliance with the certification requirements for charcoal lighter material shall be performed using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol.

(8) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D 86-90, September 28, 1990.

(9) The following methods shall be used, as necessary, to determine if a chemical compound or mixture satisfies one of the criteria as a ''LVP-VOC'' as defined in subsection (a) of this section:

(A) CARB Method 310, as adopted by CARB on September 25, 1997 and as in effect on the effective date of this section, shall be used to determine the vapor pressure or boiling point; and

(B) The number of carbon atoms shall be verifiable by formulation data.

(g) **Record keeping.**

(1) Any person who on or after January 1, 2009 sells, supplies, offers for sale or manufactures for sale in Connecticut any consumer product shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of this section.

(2) The commissioner may make a compliance determination for a product pursuant to subsection (f)(2)(B) of this section only if the manufacturer of that product maintains accurate records for each day of production of the amount and chemical composition of the individual product constituents.

(3) All records made to demonstrate compliance with the requirements of this section shall be:

(A) Made available to the commissioner and the Administrator to inspect and copy upon request; and

(B) Maintained for five (5) years from the date such record is created.

(4) No person shall create, alter, falsify or otherwise modify records in such a way that the records do not accurately reflect the constituents used to manufacture a product, the chemical composition of a product or any other test, processes or records created in connection with product manufacture.

(h) **Reporting.**

(1) Upon written notice, the commissioner may require any responsible party to report information for any consumer product including, but not limited to, the following information:

(A) The name, address, telephone number and designated contact person of the responsible party;

(B) The product brand name and label;

(C) The category to which the consumer product belongs;

(D) The applicable product form or forms listed separately;

(E) An identification of each product brand name and form as a household product, industrial and institutional product, or both;

(F) For each product form and for the previous three years, Connecticut sales in pounds per year, to the nearest pound, and the method used to calculate sales for each product form;

(G) For registrations submitted by two companies, an identification of the company that is submitting relevant data separate from that submitted by the responsible party;

(H) For each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest one-tenth of a percent (0.1%);

(i) Total exempt compounds,

(ii) Total LVP-VOCs that are not fragrances,

(iii) Total of all other compounds that contain at least one carbon atom, that are not exempt compounds or LVP-VOCs and that are not fragrances,

(iv) Total of all non-carbon containing compounds,

(v) Total fragrance,

(vi) For products containing greater than two percent (2%) by weight fragrance, the percent of fragrance that is LVP-VOCs and the percent of fragrance that is all other compounds that contain at least one carbon atom and are not exempt compounds or LVP-VOCs, and

(vii) Total paradichlorobenzene;

(I) The name, CAS number and percent weight of each VOC constituent in the product;

(J) The name and CAS number of any exempt compounds in the product;

(K) If applicable, the weight percent comprised of propellant for each product and the type of propellant; and

(L) The net percent by weight of each ozone-depleting compound that is:

(i) Listed in Table 40-2, and

(ii) Contained in a product subject to this section in any amount greater than one-tenth percent (0.1%) by weight.

(2) For consumer products that are subject to subsection (d)(1) of this section and contain perchloroethylene or methylene chloride, the commissioner may require, upon 90 days written notice, the responsible party to report the following information for products sold in Connecticut during each of the 2009 through 2010 calendar years:

(A) The product brand name and a copy of the product label with legible usage instructions;

(B) The product category to which the consumer product belongs;

(C) The applicable product form or forms, separately listed;

(D) For each product form listed under subparagraph (C) of this subdivision, the total sales in Connecticut during the reported year, to the nearest pound, exclusive of the container or packaging, and the method used for calculating the Connecticut sales; and

(E) The weight percent, to the nearest one-tenth percent (0.10 percent), of perchloroethylene or methylene chloride.

(3) For the purposes of subdivision (2) of this subsection, a product contains perchloroethylene or methylene chloride if the product contains one percent (1.0%) or more by weight, exclusive of the container or packaging, of either perchloroethylene or methylene chloride.

(4) Any document submitted to the commissioner pursuant to this section shall include a certification signed by an individual identified in section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall inquire of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and each of whom shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.''

(5) Any document required to be submitted to the commissioner pursuant to this subsection shall be submitted as a paper copy, with supporting data in either paper or electronic format, and the submitter shall maintain such a report at the premises as a paper copy with any supporting data in the format submitted for a period of five (5) years from the date of submission to the commissioner.

(6) To determine Connecticut sales pursuant to this section, if direct sales data for Connecticut are not available, sales may be estimated by prorating national or regional sales data by population.

(i) **Severability.**

Each provision of this section is deemed severable, and, in the event that any provision of this section is held to be invalid, the remainder of this section shall continue in full force and effect.

Table 40-1. VOC Content Limits for Listed Product Categories.

PRODUCT CATEGORY	VOC CONTENT LIMIT (PERCENT VOLATILE ORGANIC COMPOUNDS BY WEIGHT)
Adhesives	
Aerosol – Mist spray	65
Aerosol – Web spray	55
Contact – General Purpose	55
Contact – Special Purpose	80
Special Purpose Spray Adhesives: Mounting, automotive engine compartment, and flexible vinyl	70
Special Purpose Spray Adhesives: Polystyrene foam and automotive headliner	65
Special Purpose Spray Adhesives: Polyolefin; and laminate repair or edgebanding	60
Construction, panel and floor Covering	15
General purpose	10
Structural waterproof	15
Adhesive Removers	
Floor or Wall Covering	5
Gasket or Thread Locking	50
General Purpose	20
Specialty	70
Aerosol Cooking Spray	**18**
Air Freshener	
Single-phase aerosols	30
Double-phase aerosols	25
Liquids or Pump Sprays	18
Solids and Semi-solids	3
Antiperspirants	
Aerosol	40 HVOC 10 MVOC
Non-aerosol	0 HVOC 0 MVOC
Anti-Static Products – Non-aerosol	**11**
Automotive brake cleaners	**45**
Automotive rubbing or polishing compounds	**17**
Automotive waxes, polishes, sealants or glazes	
Hard paste wax	45
Instant detailer	3
All other forms	15
Automotive windshield washer fluid	**35**
Bathroom and tile cleaners	

Aerosols	7
All other forms	5
Bug and tar remover	**40**
Carburetor or fuel-injection air intake cleaners	**45**
Carpet and upholstery cleaners	
Aerosols	7
Non-aerosols (dilutables)	0.1
Non-aerosols (ready-to-use)	3
Charcoal Lighter Material	See subsection (d)(3) of this section
Deodorants	
Aerosol	0 HVOC 10 MVOC
Non-aerosol	0 HVOC 0 MVOC
Dusting aids	
Aerosol	25
All other forms	7
Electrical Cleaner	**45**
Electronic Cleaner	**75**
Engine Degreasers	
Aerosol	35
Non-aerosol	5
Fabric protectants	60
Fabric Refresher	
Aerosol	15
Non-Aerosol	6
Floor polish or wax	
For flexible flooring Material	7
For Nonresilient Flooring	10
Wood Floor Wax	90
Floor wax strippers (non-aerosol)	**See subsection (e)(5) of this section**
Footwear or Leather Care	
Aerosol	75
Solid	55
All Other Forms	15
Furniture maintenance products	
Aerosols	17
All other forms except solid and paste	7
General purpose cleaners	
Aerosols	10
Non-aerosols	4
General purpose degreasers	
Aerosols	50

Non-aerosols	4
Glass cleaners	
Aerosols	12
Non-aerosols	4
Graffiti Remover	
Aerosol	50
Non-Aerosol	30
Hair Mousses	**6**
Hairshines	**55**
Hairsprays	**55**
Hair Styling Product	
Aerosol and Pump Spray	6
All Other Forms	2
Heavy-duty hand cleaner	**8**
Insecticides	
Crawling Bug (aerosol)	15
Crawling Bug (all other forms)	20
Flea and Tick	25
Flying bug (aerosol)	25
Flying Bug (all other forms)	35
Foggers	45
Lawn and Garden (non-aerosol)	3
Lawn and Garden (all other forms)	20
Wasp and Hornet	40
Laundry Prewash	
Aerosols or Solids	22
All Other Forms	5
Laundry Starch Products	**5**
Metal Polishes/Cleansers	**30**
Multi-Purpose Lubricant (Excluding Solid or Semi-Solid Products)	**50**
Nail Polish Remover	**75**
Non-Selective Terrestrial herbicide Non-Aerosols	**3**
Oven Cleaners	
Aerosols or Pump Sprays	8
Liquids	5
Paint Remover or Strippers	**50**
Penetrants	**50**
Rubber and Vinyl Protectants	
Non-Aerosols	3
Aerosols	10
Sealants and Caulking Compounds	**4**

Shaving Creams	**5**
Shaving Gel	**7**
Silicone-Based Multi-Purpose Lubricants (Excluding Solid or Semi-Solid Products)	**60**
Spot Removers	
Aerosols	25
Non-Aerosols	8
Tire Sealants and Inflators	**20**
Toilet/Urinal Care Product	
Aerosol	10
Non-Aerosol	3
Undercoatings - Aerosols	**40**
Wood Cleaner	
Aerosol	17
Non-Aerosol	4

Table 40-2. Prohibited Ozone-Depleting Compounds.

CFC-11 (trichloroflouromethane)	CFC-12 (dichlorodiflouromethane)
CFC-113 (1,1,1-trichloro-2,2,2-trifluoroethane)	CFC-114 (1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane)
CFC-115 (chloropentafluoroethane)	halon 1211 (bromochlorodifluoromethane)
halon 1301 (bromotrifluoromethane)	halon 2402 (dibromotetraflouroethane)
HCFC-22 (chlorodifluoromethane)	
HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane)	HCFC-124 (2-chloro-1,1,1,2- tetrafluoroethane)
HCFC-141b (1,1-dichloro-1-fluoroethane)	HCFC-142b (1-chloro-1,1-difluoroethane)
1,1,1-trichloroethane	carbon tetrachloride

(Adopted effective July 26, 2007; amended June 12, 2009)

Sec. 22a-174-41. Architectural and industrial maintenance coatings

(a) **Definitions.** For the purposes of this section, the following definitions shall apply:

(1) ''Adhesive'' means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

(2) ''Aerosol coating product'' means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic marking applications.

(3) ''Antenna coating'' means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

(4) ''Antifouling coating'' means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms.

(5) ''Appurtenance'' means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences;

hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways; fixed ladders; catwalks; fire escapes; and window screens.

(6) ''Architectural coating'' means a coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars and automobiles, and adhesives are excluded from the definition of ''architectural coatings.''

(7) ''ASTM'' means the American Society for Testing and Materials.

(8) ''BAAQMD'' means the Bay Area Air Quality Management District, a part of the California Air Resources Board, which is responsible for the regulation of air quality in the state of California.

(9) ''Bitumens'' means black or brown materials including, but not limited to, asphalt, tar, pitch and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(10) ''Bituminous roof coating'' means a coating that incorporates bitumens that is labeled and formulated exclusively for roofing.

(11) ''Bituminous roof primer'' means a primer that incorporates bitumens that is labeled and formulated exclusively for roofing.

(12) ''Bond breaker'' means a coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

(13) ''Calcimine recoaters'' means flat, solvent-borne coatings formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.

(14) ''CAS'' means Chemical Abstract Service.

(15) ''Clear brushing lacquers'' means clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film. Such lacquers are intended to be applied only with a brush.

(16) ''Clear wood coating'' means a clear and semi-transparent coating, including lacquers and varnishes, applied to a wood substrate, to provide a transparent or translucent solid film.

(17) ''Coating'' means a material applied onto or impregnated into a substrate for protective, decorative or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers and stains.

(18) ''Colorant'' means concentrated pigment dispersion in water, solvent or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(19) ''Concrete curing compound'' means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

(20) ''Concrete surface retarders'' means a mixture of retarding ingredients such as extender pigments, primary pigments, resin and solvent that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix or cement and sand at the surface to be washed away to create an exposed aggregate finish.

(21) ''Conversion varnish'' means a clear acid curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two-

compound product. ''Conversion varnishes'' produce a hard, durable, clear finish designed for professional application to wood flooring. This film formation is the result of an acid-catalyzed condensation reaction, affecting a transetherification at the reactive ethers of the amino resins.

(22) ''Dry fog coating'' means a coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(23) ''Exempt compound'' means a compound identified in 40 CFR 51.100(s) under ''volatile organic compounds,'' as amended from time to time, as having negligible photochemical reactivity.

(24) ''Faux finishing coating'' means a coating labeled and formulated as a stain or a glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage and simulated marble and wood grain.

(25) ''Fire-resistive coating'' means an opaque coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials.

(26) ''Fire-retardant coating'' means a coating labeled and formulated to retard ignition and flame spread.

(27) ''Flat coating'' means a coating that is not defined under any other definition in this section and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter.

(28) ''Floor coating'' means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps and other horizontal surfaces which may be subjected to foot traffic.

(29) ''Flow coating'' means a coating labeled and formulated exclusively for use to maintain the protective coating systems present on utility transformer units.

(30) ''Form-release compound'' means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal or some material other than concrete.

(31) ''Graphic arts coating or sign paint'' means a coating labeled and formulated for hand-application using brush or roller techniques to indoor and outdoor signs, excluding structural components, and murals including letter enamels, poster colors, copy blockers and bulletin enamels.

(32) ''High temperature coating'' means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(33) ''Impacted immersion coating'' means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high-energy impact damage by floating ice or debris.

(34) ''Industrial maintenance coating'' means a high performance architectural coating, including primers, sealers, undercoaters, intermediate coats and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions:

(A) Immersion in water, wastewater or chemical solutions (aqueous and non-aqueous solutions), or chronic exposures of interior surfaces to moisture condensation;

(B) Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;

(C) Repeated exposure to temperatures above 121°C (250°F);

(D) Repeated and frequent heavy abrasion, including mechanical wear and repeated and frequent scrubbing with industrial solvents, cleansers or scouring agents; or

(E) Exterior exposure of metal structures and structural components.

(35) ''Lacquer'' means a clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.

(36) ''Low solids coating'' means a coating containing 0.12 kilogram or less of solids per liter (one pound or less of solids per gallon) of coating material.

(37) ''Magnesite cement coating'' means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(38) ''Manufacturer's formulation data'' means data regarding a coating that are supplied by the materials manufacturer based on the manufacturer's knowledge of the ingredients used to manufacture that coating, rather than on an EPA reference test method. ''Manufacturer's formulation data'' may include but are not limited to information on density, VOC content and coating solids content.

(39) ''Manufacturer's maximum recommendation'' means, for an architectural coating, the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

(40) ''Mastic texture coating'' means a coating labeled and formulated to cover holes and minor cracks and conceal surface irregularities, which is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

(41) ''Metallic pigmented coating'' means a coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon).

(42) ''Multi-color coating'' means a coating that is packaged in a single container and exhibits more than one color when applied in a single coat.

(43) ''Nonflat coating'' means a coating that is not defined under any other definition in this rule and registers a gloss of 15 or greater on an 85-degree meter and five or greater on a 60-degree meter.

(44) ''Nonflat-high gloss coating'' means a nonflat coating that registers a gloss of 70 or above on a 60-degree meter.

(45) ''Nonindustrial use'' means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

(46) ''Nuclear coating'' means a protective coating formulated and recommended to seal porous surfaces such as steel or concrete that otherwise would be subject to intrusion by radioactive materials. Such coatings are resistant to long-term (service life) cumulative radiation exposure, relatively easy to decontaminate and resistant to various chemicals to which such coatings are likely to be exposed.

(47) ''NYSDEC'' means the New York State Department of Environmental Conservation.

(48) ''Pesticide Management Program'' means the pesticide registration, permitting and certification program administered by the State of Connecticut Department of Environmental Protection.

(49) ''Post-consumer coating'' means a finished coating that would have been disposed of in a landfill when no longer useful to a consumer and that does not include manufacturing wastes.

(50) ''Pre-treatment wash primer'' means a primer that contains a minimum of 0.5 acid, by weight. ''Pre-treatment wash primers'' are labeled and formulated for direct application to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

(51) ''Primer'' means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

(52) ''Quick-dry enamel'' means a nonflat coating that is labeled as specified in subsection (e) of this section and that is formulated to have the following characteristics:

(A) Capable of being applied directly from the container under normal conditions with ambient temperatures between 16° and 27°C (60° and 80°F);

(B) Tack free in four hours or less and dries hard in eight hours or less by the mechanical test methods; and

(C) A dried film gloss of 70 or above on a 60-degree meter.

(53) ''Quick-dry primer sealer and undercoater'' means a primer sealer or undercoater that is dry to the touch in 30 minutes and can be re-coated in two hours.

(54) ''Recycled coating'' means an architectural coating formulated such that not less than 50 percent of the weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.

(55) ''Roof coating'' means a non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. ''Roof coatings'' containing metallic pigment shall be defined as ''metallic pigmented coatings'' for the purposes of this section.

(56) ''Rust preventive coating'' means a coating formulated exclusively for nonindustrial use to prevent the corrosion of metal surfaces.

(57) ''Sanding sealer'' means a clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A ''sanding sealer'' that also meets the definition of a lacquer is not included in this category, but it is included in the lacquer category.

(58) ''SCAQMD'' means the South Coast Air Quality Management District, a part of the California Air Resources Board, which is responsible for the regulation of air quality in the state of California.

(59) ''Sealer'' means a coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

(60) ''Secondary coating'' means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

(61) ''Shellac'' means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laciffer lacca*), thinned with alcohol and formulated to dry by evaporation without a chemical reaction.

(62) ''Shop application'' means the application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production or repairing process (e.g., original equipment manufacturing coatings).

(63) ''Solicit'' means to require for use or to specify by written or oral contract.

(64) ''Specialty primer, sealer and undercoater'' means a coating that is formulated for application to a substrate to seal fire, smoke or water damage, to condition excessively chalky surfaces, or to block stains. For the purposes of this definition, an excessively chalky surface is one that is defined as having a chalk rating of four or less.

(65) ''Stain'' means a clear, semi-transparent or opaque coating labeled and formulated to change the color of a surface, but not conceal the grain pattern or texture.

(66) ''Swimming pool coating'' means a coating labeled and formulated to coat the interior of swimming pools and resist swimming pool chemicals.

(67) ''Swimming pool repair and maintenance coating'' means a rubber-based coating labeled and formulated to be used over existing rubber-based coatings for the repair and maintenance of swimming pools.

(68) ''Temperature-indicator safety coating'' means a coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(69) ''Thermoplastic rubber coating and mastic'' means a coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40 percent by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments and modifying resins.

(70) ''Tint base'' means an architectural coating to which colorant is added, after packaging in sale units, to produce a desired color.

(71) ''Traffic marking coating'' means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks and airport runways.

(72) ''Undercoater'' means a coating labeled and formulated to provide a smooth surface for subsequent coatings.

(73) ''Varnish'' means a clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction. ''Varnish'' may contain small amounts of pigment to color a surface or to control the final sheen or gloss of the finish.

(74) ''VOC content'' means the weight of VOC per volume of coating.

(75) ''Waterproofing sealer'' means a coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

(76) ''Waterproofing concrete/masonry sealer'' means a clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light and staining.

(77) ''Wood preservative'' means a coating labeled and formulated to protect exposed wood from decay or insect attack.

(b) **Applicability.**

Except as provided in subsection (c) of this section, this section applies to any person who, on or after May 1, 2008, sells, supplies, offers for sale or manufactures for sale in the state of Connecticut any architectural coating for use in the state of Connecticut and to any person who applies or solicits the application of any architectural coating within the state of Connecticut on or after May 1, 2008.

(c) **Exemptions and exceptions.**

(1) This section shall not apply to any architectural coating manufactured in the state of Connecticut for shipment, sale and use outside of the state of Connecticut.

(2) Any architectural coating manufactured prior to May 1, 2008 may be sold, supplied or offered for sale for up to three years after May 1, 2008. In addition, a coating manufactured before May 1, 2008 may be applied at any time as long as the coating complies with any applicable VOC standard in effect at the time the coating was manufactured. The exception offered in this subdivision shall only apply to a coating that displays a date or date code as required by subsection (e)(1) of this section.

(3) This section shall not apply to any aerosol coating product.

(4) This section shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

(5) As used in this section, the terms ''supply'' and ''supplied'' shall not include internal transfers or transactions involving architectural coatings to, from or within an installation operated by any branch of the U.S. military.

(d) **Standards.**

(1) Except as provided in subdivisions (2) and (8) of this subsection and subsection (c) of this section, no person shall manufacture, blend or repackage for sale within the state of Connecticut, supply, sell or offer for sale within the state of Connecticut or solicit for application or apply within the state of Connecticut any architectural coating manufactured on or after May 1, 2008 that contains VOCs in excess of the applicable VOC content limits specified in Table 41-1. The VOC content limits of Table 41-1 apply to the grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds or colorant added to tint bases.

(2) Except as provided in subdivision (3) of this subsection, if anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or any person acting on the manufacturer's behalf, including retailers who sell under a private label, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Table 41-1, then the most restrictive VOC content limit of Table 41-1 shall apply.

(3) The requirements of subdivision (2) of this subsection shall not apply to the following coating categories:

(A) Antenna coatings;

(B) Antifouling coatings;

(C) Bituminous roof primers;

(D) Calcimine recoaters;

(E) Fire-retardant coatings;

(F) Flow coatings;

(G) High temperature coatings;

(H) Impacted immersion coatings;

(I) Industrial maintenance coatings;

(J) Lacquer coatings, including lacquer sanding sealers;

(K) Low-solids coatings;

(L) Metallic pigmented coatings;

(M) Nuclear coatings;

(N) Pretreatment wash primers;

(O) Shellacs;
(P) Specialty primers, sealers and undercoaters;
(Q) Temperature-indicator safety coatings;
(R) Thermoplastic rubber coatings and mastics; or
(S) Wood preservatives.

(4) All containers of coating that are applied directly to a surface from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means shall be closed when not in use. These containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall be closed when not in use.

(5) No person who applies or solicits the application of any architectural coating shall add additional solvent to a coating if such addition causes the coating to exceed the applicable VOC limit specified in Table 41-1 of this section.

(6) No person shall apply or solicit the application of any rust preventive coating for industrial use, unless such a rust preventive coating complies with the industrial maintenance coating VOC limit specified in Table 41-1 of this section.

(7) For any coating that is not identified in this section, the VOC content limit shall be determined by classifying the coating as a flat coating, nonflat coating or nonflat-high gloss coating, as those terms are defined in subsection (a) of this section, and the corresponding coating limit of Table 41-1 of this section shall apply.

(8) Notwithstanding the provisions of subdivision (1) of this subsection, a person may, at the time of application, add up to 10% by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70% and temperature below 65°F, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.

(e) **Container labeling.**

(1) **Date code.** On each container of an architectural coating, the manufacturer shall clearly display the date the coating was manufactured, or a date code representing the date of manufacture, as follows:

(A) The date or date code shall be located on the label, lid or bottom of the container so that it is readily observable without dissembling the container or package; and

(B) If the manufacturer uses a date code for any coating, an explanation of such code shall be available to the commissioner upon request by April 1, 2008 or not later than 90 days after making a coating available for sale in Connecticut.

(2) **Thinning.** On the label or lid of the container of an architectural coating, the manufacturer shall display a statement of the manufacturer's recommendation regarding thinning of the coating. This requirement shall not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation shall specify that the coating is to be applied without thinning.

(3) **VOC content.** On the label, lid or bottom of the container of an architectural coating, the manufacturer shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. The VOC content shall be displayed in grams of VOC per liter of coating. The VOC content displayed shall be calculated using the manufacturer's formulation data or shall be determined using the calculations, procedures and test methods in subsection (g) of this section.

(4) **Industrial maintenance coatings.** In addition to the information specified in subdivisions (1) through (3) of this subsection, the label or the lid of the container, in which a coating is sold or distributed, shall display at least one of the descriptions listed in subparagraphs (A) through (C) of this subdivision:

(A) ''**For industrial use only**;''

(B) ''**For professional use only**;'' or

(C) ''**Not for residential use**'' or ''**Not intended for residential use**.''

(5) **Clear brushing lacquer.** On the label of any clear brushing lacquer, the manufacturer shall prominently display the statements: ''**For brush application only**'' and ''**This product must not be thinned or sprayed**.''

(6) **Rust preventive coatings.** On the label of any rust preventive coating, the manufacturer shall prominently display the statement: ''**For metal substrates only**.''

(7) **Specialty primers, sealers and undercoaters.** The manufacturer of any specialty primer, sealer or undercoater shall prominently display on the label one or more of the descriptions listed in subparagraphs (A) through (E) of this subdivision, as follows:

(A) ''**For blocking stains**;''

(B) ''**For fire-damaged substrates**;''

(C) ''**For smoke-damaged substrates**;''

(D) ''**For water-damaged substrates**;'' or

(E) ''**For excessively chalky substrates**.''

(8) **Quick dry enamels.** The manufacturer of any quick dry enamel shall prominently display on the label the dry hard time and the words ''**Quick dry**.''

(9) **Non-flat high-gloss coatings.** The manufacturer of any non-flat high-gloss coating shall display prominently on the label the words ''**High gloss**.''

(f) **Record keeping and reporting requirements.**

(1) Each manufacturer of a product subject to a VOC content limit in subsection (d) of this section shall maintain records demonstrating compliance with such VOC content limits, including the following information:

(A) The product name and, if applicable, the identifying number, as shown on the product label and in sales and technical literature;

(B) The VOC content as determined according to subsection (g) of this section;

(C) The name(s) and CAS number of the VOC constituents in the product;

(D) The dates of the VOC content determinations;

(E) The coating category; and

(F) The applicable VOC content limit.

(2) All records made to demonstrate compliance with this section shall be maintained for five years from the date such record is created and shall be made available to the commissioner or the Administrator not later than 90 days after a request.

(3) Each manufacturer of a coating subject to this section shall, upon request of the commissioner, provide data concerning the distribution and sales of coatings subject to a VOC content limit in subsection (d) of this section. The manufacturer shall, not later than 90 days after receiving such a request, produce information including, but not limited to:

(A) The name and mailing address of the manufacturer;

(B) The name, address and telephone number of a contact person;

(C) The name of the product as it appears on the label and the applicable coating;

(D) Whether the coating is marketed for interior use, exterior use or both;

(E) The number of gallons sold in Connecticut in containers greater than one liter and less than one liter during the preceding calendar year;

(F) The actual VOC content and VOC content limit in grams per liter. If thinning is recommended, list the actual VOC content and VOC content limit after recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately;

(G) The name and CAS number of the VOC constituents in the coating; and

(H) The name and CAS number of any exempt compounds in the coating.

(4) For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning with the year 2009, maintain records of the following information for coatings sold in Connecticut during the preceding calendar year:

(A) The product brand name and a copy of the product label with legible usage instructions;

(B) The product category listed in Table 41-1 to which the product belongs;

(C) The total sales, to the nearest gallon, in Connecticut during the preceding calendar year; and

(D) The volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.

(5) Each manufacturer of a recycled coating shall, on or before April 1 of each calendar year beginning with the year 2009, prepare and maintain an annual report that shall include the total number of gallons of recycled coatings distributed in Connecticut during the preceding calendar year and the method used to calculate the Connecticut distribution.

(6) Any document submitted to the commissioner pursuant to this section shall include a certification signed by an individual identified in section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall inquire of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and each of whom shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.''

(g) **Compliance procedures, registration requirements and test methods.**

(1) Any person who sells, supplies, offers for sale or manufactures an architectural coating subject to this section on or after May 1, 2008 for sale in Connecticut shall possess documentation that such coating complies with the VOC content limits of Table 41-1 of this section, where the VOC content is determined according to the requirements of this subsection.

(2) The VOC content of a coating shall be determined according to the following calculations:

(A) For all coatings that are not low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's recommendation, excluding the volume of any water and exempt compounds, using the following equation:

VOC Content = (Ws - Ww - Wec)/ (Vm - Vw - Vec)
Where:
VOC Content = the VOC content of a coating (g/L of coating)
Ws = weight of volatile components (g)
Ww = weight of water (g)
Wec = weight of exempt compounds (g)
Vm = volume of coating (L)
Vw = volume of water (L)
Vec = volume of exempt compounds (L)

(B) For low solids coatings, determine the VOC content in grams per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds, using the following equation:

VOC Content (ls) = (Ws - Ww - Wec)/ (Vm)
Where:
VOC Content (ls) = the VOC content of a low solids coating (g/L of coating)
Ws = weight of volatile components (g)
Ww = weight of water (g)
Wec = weight of exempt compounds (g)
Vm = volume of coating (L)

(C) The VOC content of a tint base shall be determined prior to the addition of the colorant.

(3) The following procedures shall be used to determine the physical properties of a coating in order to perform the calculations required pursuant to subdivision (2) of this subsection:

(A) The VOC content shall be calculated according to:

(i) EPA Reference Method 24, 40 CFR 60, Appendix A,

(ii) SCAQMD Method 304-91 (revised February 1996), unless the results are inconsistent with the results of a determination pursuant to subparagraph (A)(i) of this subdivision, or

(iii) An alternative test method approved by the New York Department of Environmental Conservation and the Administrator pursuant to NYSDEC Regulations Part 205.6(c);

(B) The exempt compound content shall be determined using SCAQMD Method 303-91 (revised August 1996), except as follows:

(i) Parachlorobenzotriflouride content shall be determined using BAAQMD Method 41, and

(ii) Exempt compounds that are cyclic, branched or linear methylated siloxanes shall be determined using BAAQMD Method 43; and

(C) Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to 40 CFR 59, Subpart D, Appendix A.

(4) Fire-resistive coatings and fire-retardant coatings shall be:

(A) Fire tested and rated by a testing agency according to the appropriate methods listed in subdivision (6) if this subsection; and

(B) Approved by state building code officials for use in bringing assemblies of structural materials into compliance with federal, state and local building code requirements.

(5) The following materials are subject to registration as follows:

(A) Antifouling coatings shall be registered with both the Administrator under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. section 136 et seq.) and with the Department under the Pesticides Management Program; and

(B) Wood preservatives shall be registered under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. section 136, et. seq.) and with the Department under the Pesticides Management Program.

(6) The following test methods shall be used to test coatings for the identified properties, as applicable:

(A) Acid content of coatings. The acid content of a coating shall be determined by ASTM Designation D 1613-96, ''Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related Products;''

(B) Chemical resistance for nuclear coatings. Chemical resistance to various chemicals to which nuclear coatings are likely to be exposed shall be measured by ASTM Method D 3912-95 (2001);

(C) Drying times. The set-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, ''Standard Methods for Drying, Curing or Film Formation of Organic Coatings at Room Temperature;''

(D) Fire-resistance rating. The fire-resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, ''Standard Test Methods for Fire Tests of Building Construction Materials;''

(E) Flame spread index. The flame spread index of a fire-retardant coating shall be determined by the ASTM Designation E 84-99, ''Standard Test Methods for Surface Burning Characteristics of Building Materials;''

(F) Gloss determination. The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), ''Standard Test Method for Specular Gloss;''

(G) Long term cumulative radiation exposure. Long-term (service life) cumulative radiation exposure of ''nuclear coatings'' shall be measured by ASTM Method D 4082-02;

(H) Metal content of coatings. The metallic content of a coating shall be determined by SCAQMD Method 318-95, ''Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction,'' SCAQMD Laboratory Methods of Analysis for Enforcement Samples; and

(I) Surface chalkiness. The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, ''Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.''

Table 41-1. VOC Content Limits for Architectural Coatings.

Coating category	VOC content limit (grams VOC per liter)
Flat coatings	100
Nonflat coatings	150
Nonflat-high gloss coatings	250
Antenna coatings	530
Antifouling coatings	400
Bituminous roof coatings	300
Bituminous roof primers	350
Bond breakers	350
Calcimine recoater	475
Clear wood coatings	
Clear brushing lacquers	680

Lacquers (including lacquer sanding sealers)	550
Sanding sealers other than lacquer sanding sealers	350
Varnishes	350
Conversion varnishes	725
Concrete curing compounds	350
Concrete surface retarders	780
Dry fog coatings	400
Faux finishing coatings	350
Fire resistive coatings	350
Fire retardant coatings	
Clear	650
Opaque	350
Floor coatings	250
Flow coatings	420
Form-release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Impacted immersion coatings	780
Industrial maintenance coatings	340
Low solids coatings	120
Magnesite cement coatings	450
Mastic texture coatings	300
Metallic pigmented coatings	500
Multi-color coatings	250
Nuclear coatings	450
Pre-treatment wash primers	420
Primers, sealers and undercoaters	200
Quick-dry enamels	250
Quick-dry primers, sealers and undercoaters	200
Recycled coatings	250
Roof coatings	250
Rust preventive coatings	400
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	350
Stains	250
Swimming pool coatings and swimming pool repair and maintenance coatings	340
Temperature-indicator safety coatings	550
Thermoplastic rubber coatings and mastics	550
Traffic marking coatings	150

Waterproofing sealers	250
Waterproofing concrete/masonry sealers	400
Wood preservatives	350

(Adopted effective July 26, 2007)

Sec. 22a-174-42. Distributed generators

(a) **Definitions.** For purposes of this section, the following definitions shall apply:

''Certification'' means documentation that a distributed generator will comply with the applicable emissions standards and certification requirements of this section when installed as supplied and operated and maintained according to the manufacturer's instructions.

''Certifying entity'' means a person issuing a certification that satisfies the requirements of subsection (e) of this section.

''Combined heat and power system'' or ''CHP system'' means a distributed generator that sequentially produces both electric power and thermal energy from a single source.

''Design system efficiency'' means, for a CHP system, the sum of the full load design thermal output and electric output divided by the heat input.

''Distributed generator'' means any new or existing generator with a nameplate capacity less than 15 MW that generates electricity for other than emergency use. Electricity generated may be used either on-site or for sale under an agreement with a utility, other market participant or system operator. Such a generator may also generate electricity for use during an emergency but is not defined as an emergency generator. Such a generator may burn two fuels simultaneously but is not defined as a dual-fuel generator.

''Dual-fuel generator'' means a distributed generator that has the capacity to be fired by either a gaseous fuel, or a liquid fuel, such as diesel or No. 2 grade oil, but not by both a gaseous fuel and a liquid fuel simultaneously.

''Effective date'' means the date on which this section is adopted in accordance with the provisions of chapter 54 of the Connecticut General Statutes.

''Emergency'' means ''emergency'' as defined in section 22a-174-22(a) of the Regulations of Connecticut State Agencies.

''Emergency generator'' means ''emergency engine'' as defined in section 22a-174-22(a) of the Regulations of Connecticut State Agencies.

''Existing'' means, for a generator, installed prior to the effective date of this section.

''Flared fuel'' means gases that are emitted directly into the ambient air or burned without generating electricity or useful mechanical or thermal energy.

''Gaseous fuel'' means natural gas and other fossil fuels that are in a gaseous state when used to fuel a generator.

''Generator'' means any equipment that converts primary fuel, including fossil fuel and renewable fuel, into electricity or electricity and thermal energy.

''Installed'' means the date on which a generator is first capable of generating electricity.

''ISO'' means the International Organization for Standardization.

''Motor vehicle diesel fuel'' means on-road diesel fuel that meets sulfur limits in 40 CFR 80.29, 80.500(a) and 80.520(a) and (b).

''New'' means, for a generator, installed on or after the effective date of this section.

''Power-to-heat ratio'' means, for a CHP system, the design electrical output divided by the design recovered thermal output, where both outputs are measured in consistent units.

''Reciprocating engine'' means a stationary internal combustion engine having a crankshaft turned by linearly reciprocating pistons.

''Supplier'' means a person who manufactures, assembles or otherwise makes distributed generators available to owners and operators.

''System operator'' means a person responsible for managing a geographical region's electric bulk power generation and transmission systems.

(b) **Applicability and exemptions.**

(1) The owner or operator of a distributed generator may operate such generator without obtaining a new source review general permit for such generator or a permit issued pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies if:

(A) The generator is an emission unit with potential emissions of fifteen (15) tons or more per year of an individual air pollutant;

(B) The generator is not a new major stationary source;

(C) The generator is not a newly constructed or reconstructed major source of hazardous air pollutants subject to the requirements of section 22a-174-3a(m) of the Regulations of Connecticut State Agencies;

(D) In any calendar year, the generator is operated no more than the number of hours determined from the following equation; and

Hours of operation of a distributed = generator in a given calendar year	$\frac{(0.90)(15\ \text{tons/year})(2000\ \text{lbs/ton})}{(G_c)(E_p)}$

Where: G_c = generator capacity (MW)
E_p = applicable carbon monoxide emission limit of subsection (d) of this section (lbs/MWh)

(E) The owner or operator complies with all applicable provisions of this section.

(2) The owner or operator of a distributed generator may modify such generator without obtaining a new source review general permit for such generator or a permit issued pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies if:

(A) The generator is an emission unit with potential emissions of fifteen (15) tons or more per year of an individual air pollutant;

(B) At the time of modification, the generator is not authorized to operate pursuant to an individual permit issued pursuant to section 22a-174-3a or former section 22a-174-3 of the Regulations of Connecticut State Agencies;

(C) The modification is not a major modification to an existing major stationary source;

(D) In any calendar year, the generator is operated no more than the number of hours determined from the following equation; and

Hours of operation of a distributed = generator in a given calendar year	$\frac{(0.90)(15\ \text{tons/year})(2000\ \text{lbs/ton})}{(G_c)(E_p)}$

Where: G_c = generator capacity (MW)
E_p = applicable carbon monoxide emission limit of subsection (d) of this section (lbs/MWh)

(E) The owner or operator complies with all applicable provisions of this section.

(3) Notwithstanding subdivisions (1) and (2) of this subsection, the requirements of this section shall not apply to the owner or operator of the following generators:

(A) Any generator subject to 40 CFR 52.21;

(B) Any generator with an engine subject to 40 CFR 89, 90, 91 or 92;

(C) Any generator that is powered by a fuel cell, wind or solar energy; and

(D) Any emergency generator.

(4) A physical or operational change including installation of control equipment to an existing generator shall not result in such generator being considered a new generator pursuant to this section.

(c) **Application for an individual permit.**

(1) Nothing in this section shall preclude the commissioner from requiring an owner or operator to obtain an individual permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies.

(2) Nothing in this section shall preclude an owner or operator from applying for an individual permit pursuant to section 22a-174-3a of the Regulations of Connecticut State Agencies, if applicable.

(d) **Emissions requirements.**

(1) No owner or operator of any existing distributed generator operating in accordance with this section shall:

(A) Cause or allow the emission of any air pollutant in excess of the emissions standards identified in Table 42-1 of this section; and

(B) Cause or allow the release of carbon dioxide into the ambient air from a stack in excess of 1900 lbs/MWh.

(2) Except as provided in subsection (d)(4) of this section, no owner or operator of any new distributed generator operating in accordance with this section shall:

(A) Cause or allow the emission of any air pollutant in excess of the applicable emissions standards identified in Table 42-2 of this section. The applicable emissions standards are those standards in effect on the date that such generator is installed; and

(B) Cause or allow the release of carbon dioxide into the ambient air from a stack in excess of:

(i) 1900 lbs/MWh, if such generator is installed on or before April 30, 2012, or

(ii) 1650 lbs/MWh, if such generator is installed on or after May 1, 2012.

(3) The particulate matter standards of Tables 42-1 and 42-2 of this section shall apply only to a distributed generator with a reciprocating engine using liquid fuel.

(4) Notwithstanding subsection (d)(2) of this section, the owner or operator of any new generator using flared fuel shall meet the standards of subsection (d)(1) of this section.

(5) The owner or operator of any distributed generator that is a dual-fuel generator shall:

(A) When such generator is fueled by a gaseous fuel, operate such generator in compliance with all applicable requirements of this section; and

(B) When such generator is fueled by a liquid fuel:

(i) Be exempt from compliance with the requirements of subsections (d)(1) and (d)(2) of this section,

(ii) Operate no more than a total of thirty (30) days per year, and

(iii) Use a fuel that complies with subsection (g)(4) of this section.

(6) To demonstrate compliance with the oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this subsection, an owner or operator shall either:

(A) Obtain a certification pursuant to subsection (e) of this section; or

(B) Conduct an initial performance test as required by subdivision (d)(7) of this section.

(7) Performance testing. A distributed generator owner or operator who has not obtained a certification for such generator pursuant to subsection (e) of this section shall conduct an initial performance test for oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide, as follows:

(A) For an existing generator, an initial performance test for oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide shall be completed no later than 180 days after the effective date of this section;

(B) For a new generator, an initial performance test for oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide shall be completed no later than 180 days after installation;

(C) Each initial performance test shall be conducted at ISO full load operating conditions, unless alternative load conditions are specified by the applicable test method;

(D) Each initial performance test shall be conducted in accordance with the following methodologies:

(i) Applicable EPA Reference Methods, California Air Resources Board methods or equivalent methods approved by the commissioner, and

(ii) For a generator with a reciprocating engine using liquid fuel, particulate matter emissions shall be tested using ISO Method 8178; and

(E) If an owner or operator of a generator for which an initial performance test is conducted modifies such generator in a manner that increases emissions of oxides of nitrogen, particulate matter, carbon monoxide or carbon dioxide, the owner or operator shall, within 180 days of completing such modification, perform a test of the generator's emissions according to the requirements for an initial performance test in subparagraphs (C) and (D) of this subdivision.

(8) Each owner or operator of an existing generator operating in accordance with this section shall achieve compliance with the applicable requirements of this section no later than 180 days after the effective date of this section. Any owner or operator of an existing generator who is unable to comply with the requirements of this section 180 days after the effective date of this section shall immediately cease operation.

(9) Each owner or operator of a new generator operating in accordance with this section shall achieve compliance with the applicable requirements of this section no later than 180 days after installation.

(10) The commissioner may order emissions testing of a generator operating in accordance with this section to verify compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section. Such testing shall be performed using the applicable testing methods identified in this section or other methods identified by the commissioner.

Table 42-1. Emissions standards for an existing distributed generator.

Oxides of nitrogen (lbs/MWh)	Particulate matter (lbs/MWh)	Carbon monoxide (lbs/MWh)
4.0	0.7	10

Table 42-2. Emissions standards for a new distributed generator.

Date of installation	Oxides of nitrogen (lbs/MWh)	Particulate matter (lbs/MWh)	Carbon monoxide (lbs/MWh)
On or after January 1, 2005	0.6	0.7	10
On or after May 1, 2008	0.3	0.07	2
On or after May 1, 2012	0.15	0.03	1

(e) **Distributed generator certification.**

(1) An owner or operator of any new or existing distributed generator operating in accordance with this section may satisfy compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section by obtaining one of the following certifications:

(A) Certification by the California Air Resources Board pursuant to Title 17, sections 94200 through 94214 of the California Code of Regulations; or

(B) Certification by the generator supplier that satisfies the requirements of this subsection.

(2) A certification under subdivision (1)(B) of this subsection shall apply to a specific make and model of generator and shall include the certifying entity's statement that such make and model of generator has the ability to operate in compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section for the lesser of the first 15,000 hours of operation or three (3) years, when such generator is installed, operated and maintained according to the manufacturer's instructions.

(3) A generator's compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section when installed and operated for the lesser of the first 15,000 hours or three (3) years of operation shall be verifiable by emission tests performed as follows:

(A) Unless otherwise specified in this subsection, using EPA Reference Methods, California Air Resources Board methods or equivalent test methods approved by the commissioner;

(B) At ISO full load operating conditions unless alternative load conditions are specified by the applicable test methods;

(C) For a generator with a reciprocating engine using liquid-fuel, particulate matter emissions shall be tested using ISO Method 8178; and

(D) If the owner or operator of a certified generator modifies such generator from the original design in a manner that will increase emissions of oxides of nitrogen,

particulate matter, carbon monoxide or carbon dioxide, within 180 days of completing such modification, the owner or operator shall either:

(i) Perform a test of the generator's emissions to demonstrate compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section according to the requirements for an initial performance test in subsections (d)(7)(C) and (d)(7)(D) of this section, or

(ii) For a generator certified by the supplier, obtain from the supplier an amendment of the existing certification or a new certification of compliance of the modified generator.

(4) Documentation sufficient to demonstrate certification shall include:

(A) A valid supplier's certificate stating that the subject make and model of generator is capable of compliance as provided in subdivision (2) of this subsection; or

(B) A valid and effective Executive Order issued by the executive officer of the California Air Resources Board certifying compliance as required by subdivision (1)(A) of this subsection.

(5) Any owner or operator of a generator that is operating in compliance with the applicable standards of this section pursuant to a certification shall maintain such generator as prescribed by the manufacturer.

(6) The owner or operator of any generator that is certified to operate in compliance with the applicable standards of this section shall display the following statement on the nameplate of the generator or on a label in a conspicuous location attached to such generator with the following text:

''This generator is certified as meeting the applicable standards of R.C.S.A. section 22a-174-42 when maintained and operated in accordance with the manufacturer's instructions.''

(7) An owner or operator of a generator that is operating in compliance with the standards of this section pursuant to a certification shall comply with all other applicable requirements of this section including, but not limited to, fuel requirements, recordkeeping and reporting.

(f) **Credit for concurrent emissions reductions.** The owner or operator of a distributed generator using flared fuel or combined heat and power, or that uses an end-use efficiency measure or operates a non-emitting resource at the same facility as a generator operating in accordance with this section may receive credit on a per pollutant basis towards compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section according to the requirements of this subsection.

(1) Flared fuels. If a generator uses fuel that would otherwise be flared, the owner or operator may deduct the emissions that were or would have been produced through the fuel flaring from the actual emissions of the generator on a per pollutant basis, for the purposes of calculating compliance with the applicable oxides of nitrogen, particulate matter, carbon monoxide and carbon dioxide standards of this section, according to the following:

(A) Except as provided in subparagraph (B) of this subdivision, the owner or operator shall calculate emissions compliance credit for a pollutant using the default value of Table 42-3 of this section; and

(B) If the actual emissions from flaring fuel can be documented, such actual emissions may be used as the basis for calculating the emissions compliance credit, subject to the approval of the commissioner.

Table 42-3. Default emissions values (lbs/MMBtu) for use of flared fuels.

Pollutant	Default flared gas emissions (lbs/MMBtu)
Oxides of nitrogen	0.1
Carbon monoxide	0.7
Carbon dioxide	117

(2) Combined heat and power. The owner or operator of a CHP system may receive a compliance credit against its actual emissions on a per pollutant basis, according to the requirements of this subdivision:

(A) To be eligible for emissions credit related to thermal output, the owner or operator of a CHP system shall meet the following requirements:

(i) At least twenty percent (20%) of the fuel's total recovered energy shall be thermal and at least thirteen percent (13%) shall be electric, with a resulting power-to-heat ratio between 4.0 and 0.15, and

(ii) The design system efficiency shall be at least fifty-five percent (55%);

(B) The owner or operator of a CHP system that satisfies the requirements of subparagraph (A) of this subdivision shall calculate CHP system emissions credit on a per pollutant basis according to the following formula and the requirements of subparagraphs (C) through (E) of this subdivision:

CHP system emissions credit (lbs of pollutant/MWh of emissions) = [(T)/(F)] * [3.412/(R)]

Where: T = Per pollutant emission rate of the displaced thermal system (lbs/MMBtu)
F = Displaced thermal system efficiency
R = CHP system power-to-heat ratio

(C) For a pollutant, the emission rate of the displaced thermal system (T) shall be determined as follows:

(i) For a new CHP system, the emissions standards applicable to new natural gas-fired boilers in 40 CFR 60, Subparts Da, Db and Dc, as applicable, in lbs/MMBtu, and

(ii) For a CHP system that replaces an existing thermal system for which historic emission rates are documented, the lesser of the historic emission rate in lbs of pollutant/MMBtu, or the rate in Table 42-4 of this section;

Table 42-4. Maximum displaced system emissions rates for a CHP system replacing an existing thermal system.

Pollutant	Maximum emission rate (lbs/MMBtu)
Nitrogen oxides	0.3
Carbon monoxide	0.08
Carbon dioxide	117

(D) The efficiency of the displaced thermal system (F) shall be determined as follows:

(i) For a new system that is a boiler, 80%,

(ii) For a new system that is another process heat system, the design efficiency, unless the design efficiency of the other process heat system cannot be documented, in which case 80% shall be used, and

(iii) For a retrofit system, the historic efficiency of the displaced thermal system if:

(a) The historic efficiency can be documented, and

(b) The displaced thermal system is either enforceably shut down and replaced by the CHP system, or if its operation is measurably and enforceably reduced by the operation of the CHP system; and

(E) The emissions credit calculated for a pollutant shall be subtracted from the actual emission rate of the CHP system to produce the pollutant emission rate used for determining compliance with subsection (d) of this section.

(3) End-use efficiency and non-emitting resources. If an end-use energy efficiency and conservation measure or electricity generation that does not produce any of the emissions regulated by this section is installed and operated at a facility contemporaneous with operation of a distributed generator, then the owner or operator may submit a written request to the commissioner for approval to add the electricity savings credited to the efficiency and conservation measure or supplied by the non-emitting electricity source to the electricity supplied by the generator for the purposes of calculating compliance with the requirements of this section. In support of such a request, such owner or operator shall submit the requestor's contact information, a description of the measure that includes the installation date and the estimated lifetime, the calculation of the electricity saved or supplied, an explanation of the electricity monitoring and verification method, the amount of electricity generated by the distributed generator in the previous twelve (12) months of operation and any other information requested by the commissioner.

(g) **Fuel requirements.** The owner or operator of any distributed generator operating in accordance with this section shall use the following fuels:

(1) Any generator powered by a diesel internal combustion engine shall combust only liquid fuel that does not exceed the sulfur content of motor vehicle diesel fuel;

(2) Any gaseous fossil fuel other than natural gas combusted shall contain no more than ten grains total sulfur per 100 dry standard cubic feet;

(3) If the generator is supplied with fuel from more than one tank or if the generator and at least one other source are supplied fuel by a single fuel tank, the owner or operator shall install and operate a non-resettable fuel metering device to monitor continuously the fuel consumed by the generator's engine;

(4) The owner or operator of any distributed generator that is a dual-fuel generator shall combust only liquid fuel that does not exceed the sulfur content of motor vehicle diesel fuel; and

(5) The owner or operator of any generator with a total capacity of 200 kW or less shall be exempt from the requirement of subdivision (3) of this subsection.

(h) **Records.**

(1) The owner or operator of any distributed generator shall maintain records of the information necessary to determine compliance with the requirements of this section including, but not limited to, the information specified in this subsection, labeling each record with the calendar date on which the record is generated. Each record shall be maintained for a period of at least five (5) years from the date the record is created at a location in Connecticut identified in the notification required pursuant to subsection (j)(1) of this section.

(2) Any emissions concentrations and parameters, measured using CEM or by stack testing, shall be recorded. Such records shall specify the pollutant or parameter measured and the units of measurement.

(3) All documents and data related to any applicable distributed generator certification pursuant to subsection (e)(4) of this section shall be recorded including documentation of certification.

(4) For the owner or operator of a distributed generator receiving credit towards compliance pursuant to subsection (f) of this section, data used to determine the credit and calculations of the credit received shall be recorded.

(5) Fuel type and use shall be recorded, as follows:

(A) Records of every fuel type and quantity used, in gallons or million cubic feet, for each month;

(B) If liquid fuel is used, records of the sulfur content for each fuel shipment received;

(C) Records of the hours of operation for each month;

(D) For a dual-fuel generator using liquid fuel, days of operation using liquid fuel; and

(E) For a generator with a fuel metering device, data generated by such device.

(6) Any one of the records identified in this subdivision shall be maintained to demonstrate the sulfur content of fuel used as required by subdivision (5)(B) of this subsection:

(A) A fuel certification for a delivery of liquid fuel from a bulk petroleum provider;

(B) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or

(C) A copy of a current contract with the fuel supplier supplying the fuel used by the generator that includes the applicable sulfur content of liquid fuel as a condition of each shipment.

(7) Each date on which maintenance is performed on the distributed generator and the type of maintenance shall be recorded.

(8) The manufacturer's recommended maintenance procedures shall be recorded.

(9) Calendar days, times and duration of process and control equipment malfunctions, a description of each malfunction, the corrective action taken and the date and time such action was taken shall be recorded.

(10) The test reports and supporting calculations documenting the results of any performance test to determine compliance with a standard in this section shall be recorded.

(i) **Reports and requests.**

(1) The owner or operator of any distributed generator required to make and maintain records pursuant to this section shall provide any such records, or a copy thereof, to the commissioner upon request and shall make such records available to the commissioner to inspect at the location where maintained.

(2) Any document, notification, data or record required to be submitted to the commissioner pursuant to this section shall include a certification signed by a responsible corporate officer or a duly authorized representative of such officer, as those terms are defined in section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document or record, each of whom shall examine and be familiar with the information submitted and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate and complete, and each of whom shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining

the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.''

(3) At least ninety (90) days before any owner or operator plans to use a method or procedure pursuant to subsections (d)(7)(D)(i), (f)(1)(B) or (f)(3) of this section, such owner or operator shall submit a request for such use to the commissioner for review and written determination to grant or deny. Such request shall include information sufficient to support the request. The commissioner may require the owner or operator to submit additional information to support such a request, which the owner or operator shall supply within fourteen (14) business days. The commissioner shall issue a written response to a submitted request granting or denying the request within thirty (30) days of receipt of complete information.

(j) **Notification of operation.**

(1) Any person intending to operate a distributed generator pursuant to this section shall submit a notification to the commissioner including, but not limited to, the following information:

(A) Legal name(s), address(es) and telephone number(s) of the generator owner and operator. If the owner or operator is a corporation or a limited partnership transacting business in Connecticut, provide the exact name as registered with the Secretary of State;

(B) Location address of the premises where the generator is located;

(C) Make and model of the generator;

(D) Maximum design gross power output of the generator;

(E) Actual dates of construction and installation of an existing generator and actual or intended dates of construction and intended date of installation of a new generator;

(F) Each fuel type used or intended to be used, including the maximum sulfur content of such fuel;

(G) Actual emissions data, if available, or the manufacturer's estimates of emissions, if available; and

(H) The location address in Connecticut where records required to demonstrate compliance with this section are maintained.

(2) For an existing generator, a notification pursuant to this subsection shall be submitted no later than thirty (30) days prior to operating under this section. For a new generator, a notification under this section shall be submitted no later than thirty (30) days prior to installation.

(3) A separate notification shall be submitted for each generator operating pursuant to this section.

(4) The notification shall be sent to the Bureau of Air Management at the following address:

Director
Division of Compliance and Field Operations
Bureau of Air Management
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(Adopted effective January 1, 2005)

Sec. 22a-174-43. Portable fuel container spillage control

(a) **Definitions.** For the purposes of this section:

(1) ''Automatically close'' means closure occurs through the activation of a device or mechanism that causes a spill-proof system or spout to close, seal, and remain completely closed when not dispensing fuel.

(2) ''CARB'' means the California Air Resources Board.

(3) ''CCR'' means the California Code of Regulations.

(4) ''Closed-system portable fuel container'' means a portable fuel container that forms a complete loop between the engine and the fuel container so that any excess fuel or vapors are returned to the portable fuel container.

(5) ''Consumer'' means any person who purchases or otherwise acquires a new portable fuel container or spout or both portable fuel container and spout for personal, family, household or institutional use. A person who acquires a portable fuel container or spout or both a portable fuel container and spout for resale is not a ''consumer'' for that product.

(6) ''Distributor'' means any person to whom a portable fuel container or spout or both portable fuel container and spout is sold or supplied for the purpose of resale or distribution in commerce. This term does not include manufacturers, retailers and consumers.

(7) ''Fuel'' means a volatile liquid mixture containing hydrocarbons or a blend of a volatile liquid mixture with one or more oxygen containing ashless organic compounds, such as alcohols or ethers, which is suitable for use in spark-ignition internal combustion engines or compression-ignition internal combustion engines.

(8) ''Kerosene'' means ''kerosene'' as defined in California Code of Regulations, Title 13, Section 2467 and 2467.1.

(9) ''Manufacturer'' means any person who imports, manufactures, assembles, produces, packages, repackages or re-labels a portable fuel container or spout or both portable fuel container and spout.

(10) ''NYCRR'' means the Official Compilation of Codes, Rules and Regulations of the State of New York.

(11) ''NYSDEC'' means the New York State Department of Environmental Conservation.

(12) ''Nominal capacity'' means the volume indicated by the manufacturer that represents the maximum recommended filling level.

(13) ''Outboard engine'' means the spark-ignition marine engine mounted on a marine watercraft and used to propel such watercraft.

(14) ''Permeation'' means the process by which individual fuel molecules may penetrate the walls and components of a portable fuel container.

(15) ''Portable fuel container'' means any container or vessel with a nominal capacity of ten gallons or less intended for reuse that is designed, used, sold, or offered for sale for receiving, transporting, storing and dispensing fuel or kerosene. ''Portable fuel containers'' do not include containers or vessels permanently embossed or permanently labeled, as described in 49 CFR 172.407, with language indicating said containers or vessels are solely intended for use with non-fuel or non-kerosene products.

(16) ''Retailer'' means any person who owns, leases, operates, controls or supervises a retail outlet.

(17) ''Retail outlet'' means any establishment at which any portable fuel container or spout or both portable fuel container and spout is sold, supplied or offered for sale.

(18) ''Spill-proof spout'' means any spout that complies with the performance standards set forth in subsection (d) of this section.

(19) ''Spill-proof system'' means any configuration of portable fuel container and firmly attached spout that complies with the performance standards set forth in subsection (d) of this section.

(20) ''Spout'' means any device that can be firmly attached to a portable fuel container for dispensing the contents of a portable fuel container, but does not include a device that can be used to lengthen the spout to accommodate necessary applications.

(21) ''Target fuel tank'' means any receptacle that receives fuel from a portable fuel container.

(b) **Applicability.**

Except as provided in subsection (c) of this section, this section applies to any person who sells, supplies, offers for sale or manufactures for sale in the State of Connecticut a portable fuel container or spout or both portable fuel container and spout for use in the State of Connecticut.

(c) **Exemptions.**

(1) This section shall not apply to any portable fuel container or spout or both portable fuel container and spout manufactured in the State of Connecticut for shipment, sale and use outside of the State of Connecticut.

(2) This section shall not apply to a manufacturer or distributor who sells, supplies or offers for sale in the State of Connecticut a portable fuel container or spout or both portable fuel container and spout that does not comply with the performance standards set forth in subsection (d) of this section, provided that such manufacturer makes and keeps records demonstrating:

(A) The portable fuel container or spout or both portable fuel container and spout is intended for shipment and use outside of the State of Connecticut; and

(B) The manufacturer or distributor has taken reasonable and prudent precautions to assure that the portable fuel container or spout or both portable fuel container and spout is not distributed to or within the State of Connecticut.

(3) This section shall not apply to any safety can subject to and in compliance with the provisions of 29 CFR 1926, Subpart F.

(4) This section shall not apply to any portable fuel container with a nominal capacity of less than or equal to one (1) quart.

(5) This section shall not apply to any rapid refueling device with a nominal capacity of greater than or equal to four gallons, provided that such device:

(A) Is designed for use in an off-highway motorized vehicle competition;

(B) Creates a leak-proof seal against the target fuel tank; or

(C) Operates in conjunction with a receiver permanently installed on the target tank.

(6) This section shall not apply to marine portable fuel tanks manufactured specifically to deliver fuel through a hose attached between the portable fuel tank and an outboard engine for the purpose of operating such engine.

(7) This section shall not apply to closed-system portable fuel containers that are used exclusively for fueling remote control model airplanes.

(8) This section shall not apply to any manufacturer for any product for which the NYSDEC issued a variance pursuant to 6 NYCRR 239-7 for the period of time such variance is in effect, provided that the manufacturer submits all information and data required by 6 NYCRR 239-7 to the commissioner within thirty days of variance approval. If NYSDEC issues a variance pursuant to 6 NYCRR 239-7 more

than thirty days before the effective date of this section, the manufacturer shall submit the information and data required by 6 NYCRR 237-7 to the commissioner within thirty days of the effective date of this section, provided the underlying variance is still in effect and necessary to maintain this exemption in the State of Connecticut.

(9) This section shall not apply to any product for which the manufacturer is granted:

(A) An exemption by CARB pursuant to the Innovative Products provisions of 13 CCR 2467.4 for the period of time the CARB Innovative Products exemption remains in effect; or

(B) An exemption by the NYSDEC pursuant to the Innovative Products provisions of 6 NYCRR 239-5 for the period of time the NYSDEC Innovative Products exemption remains in effect.

(10) Any manufacturer who claims an exemption pursuant to subdivision (9) of this subsection shall submit to the commissioner, upon request therefore, a copy of the applicable CARB or NYSDEC exemption decision.

(d) **Performance Standards.**

(1) Except as provided in subsection (c) of this section, no person shall sell, supply, offer for sale or manufacture for sale in the State of Connecticut on or after May 1, 2004 and ending June 30, 2007, any portable fuel container or any portable fuel container and spout that, at the time of sale or manufacture, does not comply with the performance standards specified in subdivision (2) of this subsection.

(2) Each portable fuel container and each portable fuel container and spout shall:

(A) Have an automatic shut-off that stops fuel flow before the target tank overflows;

(B) Automatically close and seal when removed from the target fuel tank and remain completely closed when not dispensing fuel;

(C) Have only one opening for both filling and pouring;

(D) Have a permeation rate of less than or equal to four-tenths (0.4) grams per gallon per day; and

(E) Be warranted by the manufacturer for a period of not less than one year against all defects in material and workmanship.

(3) Except as provided in subsection (c) of this section, no person shall sell, supply, offer for sale or manufacture for sale in the State of Connecticut on or after May 1, 2004 and ending June 30, 2007, any spout that, at the time of sale or manufacture, does not comply with the performance standards specified in subdivision (4) of this subsection.

(4) Each spill-proof spout shall:

(A) Have an automatic shut-off that stops fuel flow before the target tank overflows;

(B) Automatically close and seal when removed from the target fuel tank and remain completely closed when not dispensing fuel; and

(C) Be warranted by the manufacturer for a period of not less than one year against all defects in material and workmanship.

(5) On or after July 1, 2007, except as provided in subsection (c) of this section, no person shall sell, supply, offer for sale or manufacture for sale in the state of Connecticut, a portable fuel container or spout or both portable fuel container and spout that, at the time of sale or manufacture, is not certified for use and sale by the manufacturer through the California Air Resources Board and covered by an

Executive Order issued by CARB pursuant to 13 CCR Chapter 9, Article 6, Section 2467.2(d).

(e) **Labeling Requirements.**

(1) Each manufacturer of a portable fuel container or portable fuel container and spout subject to this section shall clearly display on each spill-proof system:

(A) The phrase ''Spill-Proof System;''

(B) A date of manufacture or a representative date; and

(C) A representative code identifying the portable fuel container or portable fuel container and spout as subject to this section and in compliance with subsection (d) of this section.

(2) Each manufacturer of a spout subject to this section shall clearly display on the accompanying package, or for a spill-proof spout sold without packaging, on either the spill-proof spout or a label affixed thereto:

(A) The phrase ''Spill-Proof Spout;''

(B) A date of manufacture or a representative date; and

(C) A representative code identifying the spout as subject to this section and in compliance with subsection (d) of this section.

(3) Each manufacturer of a portable fuel container or portable fuel container and spout subject to and complying with subsection (d)(5) of this section shall clearly display on each spill-proof system:

(A) The phrase ''Spill-Proof System;''

(B) A date of manufacture or a representative date; and

(C) A representative code identifying the Executive Order Number issued by CARB for the portable fuel container and spout.

(4) Each manufacturer subject to this section shall file an explanation of both the date code and representative date code with the commissioner no later than three months after the effective date of this section or within ninety (90) days of production or any change in coding.

(5) Each manufacturer subject to subdivision (2) of this subsection shall clearly display, on the accompanying package, or for spill-proof spouts sold without packaging, on either the spill-proof spout, or a label fixed thereto, the make, model number and size of each portable fuel container the spout is designed to accommodate, provided the identified combinations of container and spout shall comply with all applicable provisions of this section.

(6) No manufacturer shall display or affix the phrase ''Spill-Proof System'' or ''Spill-Proof Spout'' to a portable fuel container or a portable fuel container and spout unless such container and spout comply with all applicable provisions of subsection (d) of this section.

(7) If, due to its design or other features, a portable fuel container or a portable fuel container and spout cannot be used to refuel one or more on-road motor vehicles, the manufacturer shall clearly display the phrase ''Not Intended For Refueling On-Road Motor Vehicles'' in thirty-four (34) point type or greater on:

(A) An affixed label and the accompanying package, if any, for any portable fuel container or portable fuel container and spout sold together as a spill-proof system; and

(B) Either the spill-proof spout or a label affixed thereto, and the accompanying package, if any, for any spill-proof spout.

(f) **Compliance Test Procedures.**

(1) Each manufacturer of a portable fuel container or spout or both a portable fuel container and spout shall perform the compliance tests specified in subdivisions

(2) and (3) of this subsection prior to allowing the product to be offered for sale in the State of Connecticut or at any other time directed to do so by the commissioner.

(2) To determine compliance with the standards set forth in subsection (d) of this section, each manufacturer shall use the following test procedures:

(A) For portable fuel containers manufactured on or before June 30, 2007:

(i) ''Test Method 510, Automatic Shut-Off Test Procedure For Spill-Proof Systems And Spill-Proof Spouts,'' adopted by CARB on July 6, 2000, as amended July 26, 2006, and

(ii) ''Test Method 511, Automatic Closure Test Procedure For Spill-Proof Systems And Spill-Proof Spouts,'' adopted by CARB on July 6, 2000; and

(B) For portable fuel containers manufactured on or after July 1, 2007, ''CP-501, Certification Procedure for Portable Fuel Containers and Spill-Proof Spouts'', adopted July 26, 2006, or alternative methodology approved in writing by CARB.

(3) To determine compliance with the permeation standard set forth in subsection (d)(2)(D) of this section, each manufacturer shall use the test procedures set forth in subdivision (2) of this subsection and ''Test Method 513, Determination Of Permeation Rate For Spill-Proof Systems,'' adopted by CARB on July 6, 2000.

(4) Each manufacturer must make and keep records of the compliance tests specified in subdivisions (2) and (3) of this subsection for as long as the product is available for sale in the State of Connecticut and make any test results available to the commissioner within thirty (30) days after receiving a request by the commissioner for such records.

(5) Compliance with the performance standards set forth in subsection (d) of this section does not exempt any manufacturer of a spill-proof system or spill-proof spout from the duty to comply with all other applicable federal and state requirements.

(6) Notwithstanding the provisions of subsections (d)(1) and (d)(3) of this section, a portable fuel container or spout or both a portable fuel container and spout manufactured before May 1, 2004, may be sold, supplied or offered for sale until May 1, 2005 if the date of manufacture or a date code representing the date of manufacture is clearly displayed on the portable fuel container or spout.

(7) Notwithstanding the provisions of subsections (d)(1) and (d)(3) of this section, a portable fuel container manufactured prior to the effective date of this section may be sold or offered for sale on or before January 1, 2008 if it is labeled or designated for use solely with kerosene and if the date of manufacture or a date code representing the date of manufacture is clearly displayed on the portable fuel container.

(Adopted effective May 10, 2004; amended January 29, 2007)

Sec. 22a-174-44. Adhesives and sealants

(a) **Definitions.** For the purposes of this section, the following definitions shall apply:

(1) ''Acrylonitrile-butadiene-styrene welding adhesive'' or ''ABS welding adhesive'' means any adhesive intended by the manufacturer to weld acrylonitrile-butadiene-styrene pipe, which is made by reacting monomers of acrylonitrile, butadiene and styrene.

(2) ''Adhesive'' means any chemical compound, such as an organic polymer, that is applied for the purpose of bonding two surfaces together by other than mechanical means.

(3) ''Adhesive primer'' means any product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to enhance the bonding surface.

(4) ''Aerosol adhesive'' means an adhesive packaged as an aerosol in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without ancillary hoses or spray equipment.

(5) ''Aerospace component'' means the fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including passenger safety equipment.

(6) ''Architectural'' means pertaining to stationary structures, including mobile homes, and their appurtenances. Appurtenances to an architectural structure include, but are not limited to, hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts and windows.

(7) ''As applied'' means the composition of an adhesive, sealant or primer at the time it is applied to a substrate, including any solvent, catalyst or other substance added to the as supplied adhesive, sealant or primer.

(8) ''As supplied'' means the composition of an adhesive, sealant or primer as sold to a retail customer. For multi-component adhesives, sealants or primers, ''as supplied'' means the composition after the component parts are combined as specified by the manufacturer and before the addition, at the user's initiative, of any ancillary substances.

(9) ''Automotive glass adhesive primer'' means an adhesive primer intended by the manufacturer to be applied to automotive glass prior to installation of the glass using an adhesive. ''Automotive glass adhesive primer'' improves the adhesion to the pinch weld and blocks ultraviolet light.

(10) ''CARB'' means the California Air Resources Board.

(11) ''Ceramic tile installation adhesive'' means any adhesive intended for use in the installation of ceramic tiles.

(12) ''Chlorinated polyvinyl chloride welding adhesive'' or ''CPVC welding adhesive'' means any adhesive intended for welding of CPVC plastic pipe.

(13) ''Cleanup solvent'' means a VOC-containing solvent used to remove a loosely held uncured adhesive or sealant from a substrate or to clean equipment used in applying an adhesive, a sealant or a primer.

(14) ''Computer diskette jacket manufacturing adhesive'' means any adhesive intended by the manufacturer to glue the fold-over flaps to the body of a vinyl computer diskette jacket.

(15) ''Contact bond adhesive'' means any adhesive that forms an instantaneous, non-repositionable bond when substrates, on which the adhesive was applied and allowed to dry, are brought together using momentary pressure. ''Contact bond adhesive'' does not include rubber cements that are primarily intended for use on paper substrates or vulcanizing fluids designed and labeled for tire repair only.

(16) ''Cove base'' means a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or in forming an inside corner.

(17) ''Cove base installation adhesive'' means any adhesive intended by the manufacturer for the installation of cove base or wall base on a wall or vertical surface at floor level.

(18) ''Cyanoacrylate adhesive'' means any single-component reactive diluent adhesive that contains at least 85% by weight methyl, ethyl, methoxymethyl or other functional groupings of cyanoacrylate.

(19) ''Exempt compound'' means compounds of carbon excluded from the definition of ''VOC'' in section 22a-174-1 of the Regulations of Connecticut State Agencies.

(20) ''Flexible vinyl'' means non-rigid polyvinyl chloride plastic with at least five percent, by weight, plasticizer content.

(21) ''Fiberglass'' means a material made of extremely fine filaments of glass.

(22) ''Indoor floor covering installation adhesive'' means any adhesive intended by the manufacturer for use in the installation of finish surface wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll or artificial grass. Adhesive used to install ceramic tile or perimeter bonded sheet vinyl flooring is not ''indoor floor covering installation adhesive.''

(23) ''Laminate'' means a material made by bonding two or more sheets or layers.

(24) ''Low-solids adhesive, sealant or primer'' means any adhesive, sealant or primer product that contains 120 grams or less of solids per liter of product.

(25) ''Marine deck sealant'' or ''marine deck sealant primer'' means any sealant or sealant primer intended by the manufacturer for application to wooden marine decks.

(26) ''Medical equipment manufacturing'' means the manufacture of medical devices, such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheostomy tubes, blood oxygenators or cardiatory reservoirs.

(27) ''Metal-to-elastomer molding or casting adhesive'' means any adhesive intended by the manufacturer to bond metal to rubber or urethane elastomers using a heated molding or casting process in order to fabricate products.

(28) ''Multipurpose construction adhesive'' means any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including, but not limited to, dry wall, subfloor, panel, fiberglass reinforced plastic, ceiling tile or acoustical tile.

(29) ''Nonmembrane roof installation or repair adhesive'' means any adhesive intended by the manufacturer for use in the installation or repair of nonmembrane roofs, including, but not limited to, plastic or asphalt roof cement, asphalt roof coating or cold application cement. Adhesive intended for use in the installation of pre-fabricated single-ply roof membrane is not ''nonmembrane roof installation or repair adhesive.''

(30) ''Outdoor floor covering installation adhesive'' means any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

(31) ''Panel installation'' means the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, or similar pre-decorated or non-decorated panels to studs or solid surfaces using an adhesive formulated for that purpose.

(32) ''Perimeter bonded sheet vinyl flooring installation'' means the installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip no more than four inches wide around the perimeter of the sheet flooring.

(33) ''Plastic cement welding adhesive'' means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

(34) ''Plastic cement welding primer'' means any primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

(35) ''Plasticizer'' means any substance, such as a high boiling point organic solvent, that is added to a hard plastic to provide flexibility or pliability.

(36) ''Polyvinyl chloride welding adhesive'' or ''PVC welding adhesive'' means any adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.

(37) ''Porous material'' means wood, paper, corrugated paperboard or other solid that has tiny openings, often microscopic, in which fluids may be absorbed or discharged.

(38) ''Reactive diluent'' means a liquid reactant in an uncured adhesive, sealant or primer that reacts chemically or physically during the curing process to become an integral part of the cured adhesive, sealant or primer.

(39) ''Roadway sealant'' means any sealant intended by the manufacturer for application to public streets, highways and other surfaces, including, but not limited to, curbs, berms, driveways or parking lots.

(40) ''Rubber'' means any natural or manmade elastomer, including, but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene or ethylene propylene diene terpolymer.

(41) ''SCAQMD'' means the South Coast Air Quality Management District, a part of the California Air Resources Board, which is responsible for the regulation of air quality in the State of California.

(42) ''Sealant primer'' means any product intended by the manufacturer for application to a substrate, prior to the application of a sealant, to enhance the bonding surface.

(43) ''Sealant'' means any material with adhesive properties that is formulated primarily to fill, seal, waterproof or weatherproof gaps or joints between two surfaces. Sealers and other materials that are applied to a single substrate to protect or decorate are not ''sealants.''

(44) ''Sheet-applied rubber installation'' means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion, inclusive of the process of laminating sheet rubber to fabric by hand.

(45) ''Single-ply roof membrane'' means a prefabricated single sheet of compounded synthetic material such as ethylene propylenediene monomer, polyvinyl chloride, thermal polyolefin or ketone ethylene ester that is applied in a single layer to a building roof.

(46) ''Single-ply roof membrane installation or repair adhesive'' means any adhesive intended by the manufacturer for use in the installation or repair of single-ply roof membrane.

(47) ''Single-ply roof membrane adhesive primer'' means any primer intended by the manufacturer for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

(48) ''Single-ply roof membrane sealant'' means any sealant intended by the manufacturer for application to single-ply roof membrane.

(49) ''Solvent'' means any organic compounds that are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or other related uses.

(50) ''Structural glazing adhesive'' means any adhesive intended by the manufacturer to apply glass, ceramic, metal, stone or composite panels to exterior building frames.

(51) ''Surface preparation solvent'' means a solvent used to remove dirt, oil and other contaminants from a substrate prior to the application of a primer, adhesive or sealant.

(52) ''Thin metal laminating adhesive'' means any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic, in the production of electronic or magnetic components, in which the thickness of the bond line or lines is less than 0.25 mils.

(53) ''Tire repair'' means a process that includes expanding a hole, tear, fissure or blemish in a tire casing by grinding or gouging, applying adhesive and filling the hole or crevice with rubber.

(54) ''Tire retread adhesive'' means any adhesive intended by the manufacturer for application to the back of pre-cure tread rubber and to the casing and cushion rubber. ''Tire retread adhesive'' may also be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.

(55) ''Traffic marking tape'' means preformed reflective film intended by the manufacturer for application to streets, highways and other surfaces where pavement markings are desired, including, but not limited to, curbs, berms, driveways and parking lots.

(56) ''Traffic marking tape adhesive primer'' means any primer intended by the manufacturer for application to a substrate prior to installation of traffic marking tape.

(57) ''Twelve-month rolling aggregate'' means the amount of adhesives, sealants, primers or solvents used in a twelve-month period, calculated each month by adding the current month's adhesive, sealant, primer or solvent use to the amount used in each of the previous eleven months.

(58) ''Undersea-based weapons systems components'' means the fabrication of parts, assembly of parts or completed units of any portion of a missile launching system used on submarines.

(59) ''Waterproof resorcinol glue'' means a two-part resorcinol-resin-based adhesive intended for continuous water immersion.

(b) **Applicability.**

(1) Except as provided in subsection (c) of this section, this section applies to any person who, on or after January 1, 2009, sells, supplies or offers for sale for use in the State of Connecticut any adhesive, sealant, adhesive primer or sealant primer subject to a VOC content limit in Table 44-1 of this section.

(2) Except as provided in subsection (c) of this section, this section applies to any person who, on or after January 1, 2009, manufactures for sale for use in the State of Connecticut any adhesive, sealant, adhesive primer or sealant primer subject to a VOC content limit in Table 44-1 of this section.

(3) Except as provided in subsection (c) of this section, this section applies to any person who, on or after January 1, 2009, uses or applies within the State of Connecticut, or solicits the use or application of within the State of Connecticut, any adhesive, sealant, adhesive primer or sealant primer with an applicable VOC content limit in either Table 44-1 or Table 44-2 of this section.

(c) **Exemptions and exceptions.**

(1) The requirements of this section shall not apply, except as otherwise noted, to the manufacture, sale or use of the following adhesives, sealants, adhesive primers, sealant primers or solvents:

(A) Adhesives, sealants, adhesive primers or sealant primers being tested or evaluated in any research and development, quality assurance or analytical laboratory, provided that records are maintained as specified in subsection (f)(4) of this section;

(B) Adhesives or sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and exempt compounds, as applied;

(C) Cyanoacrylate adhesives;

(D) Aerosol adhesives;

(E) Adhesives, sealants, adhesive primers or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid

ounces or less, or a net weight of one pound or less, except plastic cement welding adhesives and contact bond adhesives;

(F) Adhesives, sealants, adhesive primers and sealant primers that are subject to a VOC content limit in section 22a-174-40 of the Regulations of Connecticut State Agencies;

(G) Contact bond adhesives that are sold or supplied by the manufacturer or supplier in a container with a net volume of one gallon or less; or

(H) Adhesives, cleanup solvents and surface preparation solvents used in the assembly, repair and manufacture of submarines, when the use of a noncomplying adhesive or solvent is necessary to meet military performance specifications, provided that records of the use of such noncompliant adhesives or solvents are maintained in accordance with subsection (f)(1) of this section.

(2) The requirements of this section shall not apply to the use of adhesives, sealants, adhesive primers, sealant primers, surface preparation solvent and cleanup solvent in the following operations:

(A) Tire repair operations, provided the label of the adhesive states ''**For tire repair only**;''

(B) Assembly, repair or manufacture of undersea-based weapon systems;

(C) Assembly, repair or manufacture of aerospace components;

(D) Manufacture of medical equipment;

(E) Metal cleaning performed in accordance with section 22a-174-20(*l*) of the Regulations of Connecticut State Agencies; or

(F) Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992. Any person claiming exemption pursuant to this subparagraph shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption and in accordance with subsection (f) of this section.

(3) The provisions of this section shall not apply to the use of adhesives, sealants, adhesive primers or sealant primers at a facility if the total VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used at the facility are less than 200 pounds, or an equivalent volume, per any twelve-month rolling aggregate. Emissions from cold cleaning units, vapor degreasers and aerosol products shall not be included in determining the total VOC emissions. Any person claiming exemption pursuant to this subdivision shall record and maintain monthly operational records sufficient to demonstrate continued eligibility for this exemption and in accordance with subsection (f) of this section, as applicable.

(4) The VOC content limits in Tables 44-1 and 44-2 and the requirements of subsections (d)(7) and (d)(8) of this section shall not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents and surface preparation solvents provided the total volume of noncomplying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide does not exceed 55 gallons per any twelve-month rolling aggregate. Any person claiming exemption pursuant to this subdivision shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption and in accordance with subsection (f) of this section.

(5) This section shall not apply to any manufacturer or distributor who sells, supplies or offers for sale in the State of Connecticut any adhesive, sealant, adhesive primer or sealant primer that does not comply with the VOC content limits specified in Table 44-1 of this section provided that such manufacturer or distributor makes and keeps records demonstrating:

(A) The adhesive, sealant, adhesive primer or sealant primer is intended for shipment and use outside of the State of Connecticut; and

(B) The manufacturer or distributor has taken reasonable precautions to assure that the adhesive, sealant, adhesive primer or sealant primer is not distributed to or within the State of Connecticut.

(6) Subdivision (5) of this subsection shall not apply to any manufacturer or distributor who sells, supplies or offers for sale any adhesive, sealant, adhesive primer or sealant primer to a retail outlet in the State of Connecticut.

(7) The VOC content limits of Table 44-1 of this section shall not apply to the sale of any adhesive, sealant, adhesive primer or sealant primer to a person using add-on air pollution control equipment to control emissions of VOC from such adhesive, sealant, adhesive primer or sealant primer at the stationary source, if the add-on air pollution control equipment meets the requirements of subsection (d)(6) of this section.

(8) This section shall not apply to the use of any adhesive, sealant, adhesive primer, sealant primer, cleanup solvent or surface preparation solvent at a private residence for non-commercial purposes.

(9) The requirements of this section shall not apply to any adhesive, sealant, adhesive primer, sealant primer, cleanup solvent or surface preparation solvent that is distributed or transferred by a branch of the United States military to, from or within a premises operated by that branch of the United States military.

(10) The requirements of this section shall apply to the use of single-ply roof membrane installation or repair adhesive, single-ply roof membrane sealant and single-ply roof membrane adhesive primer on the following schedule:

(A) For the year 2009, from June 1 through August 31;

(B) For the years 2010 and 2011, from May 1 through September 30; and

(C) On and after January 1, 2012.

(11) The requirements of this section shall not apply to any manufacturer or distributor who sells, supplies or offers for sale any single-ply roof membrane installation or repair adhesive, single-ply roof membrane sealant or single-ply roof membrane adhesive primer prior to January 1, 2012.

(d) **Standards.**

(1) Except as provided in subsections (c) and (d)(6) of this section, on or after January 1, 2009, no person shall sell, supply or offer for sale for use in the State of Connecticut any adhesive, sealant, adhesive primer or sealant primer manufactured on or after January 1, 2009 unless such adhesive, sealant, adhesive primer or sealant primer complies with the applicable VOC content limits specified in Table 44-1 of this section and the applicable requirements of this subsection.

(2) Except as provided in subsections (c) and (d)(6) of this section, on or after January 1, 2009, no person shall manufacture for sale for use in the State of Connecticut any adhesive, sealant, adhesive primer or sealant primer unless such adhesive, sealant, adhesive primer or sealant primer complies with the applicable VOC content limits specified in Table 44-1 of this section and the applicable requirements of this subsection.

(3) Except as provided in subsections (c)(1) through (c)(4), (c)(7), (c)(9), (c)(10), (c)(11) and (d)(6) of this section, on or after January 1, 2009, no person shall use or apply, or solicit the use or application of, any adhesive, sealant, adhesive primer or sealant primer within the State of Connecticut unless such adhesive, sealant, adhesive primer or sealant primer as applied complies with the applicable VOC

content limits specified in Table 44-1 or Table 44-2 of this section and the applicable requirements of this subsection.

(4) For adhesives, the VOC content limits of Tables 44-1 and 44-2 of this section shall apply as follows:

(A) If a person uses an adhesive subject to a specific VOC content limit in Table 44-1, such specific limit shall apply, and no limit in Table 44-2 shall apply; and

(B) If an adhesive is not listed in Table 44-1, a VOC content limit in Table 44-2 shall apply based on the substrate bonded by the adhesive. If an adhesive is used to bond two different substrates together, the substrate assigned the higher VOC content limit shall apply to such use.

(5) Any person using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents or clean-up solvents subject to this section shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with such adhesives, sealants, primers or solvents, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.

(6) A person using an adhesive, sealant, adhesive primer or sealant primer subject to this section may comply with the VOC content limits of Tables 44-1 and 44-2 of this section using add-on air pollution control equipment if such equipment meets the following requirements:

(A) The VOC emissions from the use of all adhesives, sealants, adhesive primers or sealant primers subject to this section are reduced by an overall capture and control efficiency of at least 85%, by weight;

(B) The combustion temperature is monitored continuously if a thermal incinerator is operated;

(C) Inlet and exhaust gas temperatures are monitored continuously if a catalytic incinerator is operated;

(D) The VOC concentration of the inlet and exhaust gas is measured continuously if a carbon absorber or control device other than a thermal or catalytic incinerator is operated; and

(E) Operational records sufficient to demonstrate compliance with the requirements of this subdivision are maintained as required by subsection (f) of this section.

(7) Any person using a surface preparation solvent shall:

(A) Except as provided in subparagraph (B) of this subdivision for single-ply roofing, limit the VOC content of surface preparation solvent used to less than 70 grams per liter; or

(B) If a surface preparation solvent is used in applying single-ply roofing, limit the composite vapor pressure, excluding water and exempt compounds, of the surface preparation solvent used to less than or equal to 45 mmHg at 20 degrees Celsius.

(8) Any person using a cleanup solvent shall:

(A) Except as provided in subparagraph (B) of this subdivision, limit the composite vapor pressure of a cleanup solvent to less than 45 mmHg at 20 degrees Celsius; or

(B) When cleaning spray application equipment, perform the removal of an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment in accordance with either subparagraph (i) or (ii), as follows:

(i) In an enclosed cleaning system, or equivalent cleaning system as determined by the test method identified in subsection (e)(4) of this section, or

(ii) Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter. As necessary, parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt com-

pounds, is less than or equal to 9.5 mmHg at 20 degrees Celsius, and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container.

(9) No person who applies or solicits the application of any adhesive, sealant, adhesive primer or sealant primer subject to this section shall add solvent to such adhesive, sealant or primer in an amount in excess of the manufacturer's recommendation for application, if such addition causes the adhesive, sealant or primer to exceed the applicable VOC content limit of this section.

(e) **Compliance procedures and test methods.**

(1) Any person who sells, supplies, offers for sale or manufactures an adhesive, sealant, adhesive primer or sealant primer subject to this section on or after January 1, 2009 for sale in the State of Connecticut shall possess documentation that such adhesive, sealant, adhesive primer or sealant primer complies with the VOC content limits of Table 44-1 of this section, where the VOC content is determined according to the requirements of subdivisions (2) and (3) of this subsection. For single-ply roof membrane installation or repair adhesive, single-ply roof membrane sealant and single-ply roof membrane adhesive primer, such documentation is required on and after January 1, 2012.

(2) The VOC content (grams per liter and percent by weight) of adhesive, sealant, primer and solvent products subject to this section, shall be determined according to the following calculations:

(A) For products that do not contain reactive diluents, grams of VOC per liter of product thinned to the manufacturer's recommendation, less water and exempt compounds, shall be calculated according to the following equation:

$$\text{Grams of VOC per liter of product} = \frac{Ws - Ww - We}{Vm - Vw - Ve}$$

Where

Ws = weight of volatile compounds, in grams
Ww = weight of water, in grams
We = weight of exempt compounds, in grams
Vm = volume of product, as supplied, in liters
Vw = volume of water, in liters
Ve = volume of exempt compounds, in liters;

(B) For products that contain reactive diluents, the VOC content of the product is determined after curing. The grams of VOC per liter of product thinned to the manufacturer's recommendation, less water and exempt compounds, shall be calculated according to the following equation:

$$\text{Grams of VOC per liter of product} = \frac{Wrs - Wrw - Wre}{Vrm - Vrw - Vre}$$

Where

Wrs = weight of volatile compounds not consumed during curing, in grams
Wrw = weight of water not consumed during curing, in grams
Wre = weight of exempt compounds not consumed during curing, in grams
Vrm = volume of product, as supplied, not consumed during curing, in liters

Vrw = volume of water not consumed during curing, in liters
Vre = volume of exempt compounds not consumed during curing, in liters;

(C) Grams of VOC per liter of product thinned to the manufacturer's recommendation shall be calculated according to the following equation:

$$\text{Grams of VOC per liter of product} = \frac{Ws - Ww - We}{Vm}$$

Where
Ws = weight of volatile compounds, in grams
Ww = weight of water, in grams
We = weight of exempt compounds, in grams
Vm = volume of product, in liters; and

(D) Percent VOC by weight shall be calculated according to the following equation:

$$\%\ \text{VOC by weight} = [(Wv / W)] \times 100$$

Where
Wv = weight of VOCs in grams
W = weight of product in grams

(3) The following procedures shall be used to determine the properties of the specified adhesives, sealants, primers, solvents or components thereof in order to perform the calculations required pursuant to subdivision (2) of this subsection or to verify calculations based on formulation data:

(A) Except as provided in subparagraphs (C), (D) and (E) of this subdivision, the VOC and solids content of all adhesives, adhesive primers, sealants, sealant primers, surface preparation solvents and cleanup solvents shall be determined using 40 CFR 60, Appendix A, Reference Method 24, or SCAQMD Method 304;

(B) The volatile organic content of exempt organic compounds shall be determined using ASTM D4457-02 or the most current version of such test, as applicable;

(C) The VOC content of any plastic welding cement adhesive or primer shall be determined using SCAQMD Method 316A;

(D) The amount of reactive diluent in a product shall be determined using SCAQMD Method 316A;

(E) The composite vapor pressure of volatile organic compounds in surface preparation solvents and cleanup solvents shall be determined by quantifying the amount of each compound in the blend using gas chromatographic analysis (ASTM E260-96(2006) or the most current version of such test) for organics and ASTM D3792-05 or the most current version of such test, for water content, as applicable, and the following equation:

$$Ppc = \left[\sum_{i=1}^{n} (Wi)(Vpi) / Mwi \right] / \left[(Ww / Mww) + \sum_{i=1}^{n} (We / Mwe) + \sum_{i=1}^{n} (Wi / Mwi) \right]$$

Where
Ppc = VOC composite partial pressure at 20 degrees C, in mmHg
Wi = Weight of the ''i''th VOC compound, in grams, as determined by ASTM E260-96(2006) or the most current version of such test

V*pi* = Vapor pressure of the ''i''th VOC compound at 20 degrees C, in mmHg, as determined by subparagraph (F) of this subdivision
Mw*i* = Molecular weight of the ''i''th VOC compound, in grams per g-mole, as given in chemical reference literature
Ww = Weight of water, in grams as determined by ASTM D3792-05 or the most current version of such test
Mww = Molecular weight of water, 18 grams per g-mole
We = Weight of the ''i''th exempt compound, in grams, as determined by ASTM E260-96(2006) or the most current version of such test
Mwe = Molecular weight of the ''i''th exempt compound, in grams per g-mole, as given in chemical reference literature

(F) The vapor pressure of each single component compound may be determined from ASTM D2879-97(2007), or the most current version of such test, or may be obtained from any of the following sources:

(i) The most recent edition of *The Vapor Pressure of Pure Substances*, Boublik, Fried, and Hala, eds., Elsevier Scientific Publishing Company, New York,

(ii) The most recent edition of *Perry's Chemical Engineer's Handbook*, McGraw-Hill Book Company,

(iii) The most recent edition of *CRC Handbook of Chemistry and Physics*, Chemical Rubber Publishing Company,

(iv) The most recent edition of *Lange's Handbook of Chemistry*, John Dean, editor, McGraw-Hill Book Company, or

(v) Additional sources approved for this purpose by the Commissioner.

(4) The active and passive solvent losses from spray gun cleaning systems shall be determined using SCAQMD's ''General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems,'' dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm of Hg at 20 degrees Celsius, and the minimum test temperature shall be 15 degrees Celsius.

(5) Control device efficiency shall be measured in accordance with 40 CFR 60 Appendix A, Reference Methods 18, 25, 25A and 25B or CARB Method 100.

(6) If the organization responsible for preparing any reference or test method identified in this subsection replaces that method with an equivalent method, then either the identified method or its replacement may be used for the purposes of this section.

(f) **Record keeping and reporting requirements.**

(1) Except if add-on air pollution control equipment is used to comply with the VOC content limits of Tables 44-1 or 44-2 of this section, as provided in subsection (d)(6) of this section, and records are maintained as required in subsection (f)(2) of this section, each person subject to this section shall maintain records of the information necessary and sufficient for the Commissioner to determine compliance with the applicable requirements of this section. Such information may include:

(A) A list of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent and surface preparation solvent in use and in storage;

(B) Identification of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent and surface preparation solvent by product name and description;

(C) The VOC content of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent and surface preparation solvent product as supplied;

(D) The mix ratio of any catalysts, reducers or other components used;

(E) The final VOC content or vapor pressure of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent and surface preparation solvent, as applied; or

(F) The monthly volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent or surface preparation solvent used.

(2) Any person who complies with the VOC content limits of Table 44-1 or Table 44-2 of this section through the use of add-on air pollution control equipment shall record the key operating parameters for the control equipment, including but not limited to, the following information:

(A) The volume used per day of each adhesive, sealant, adhesive primer, sealant primer or solvent that is subject to a VOC content limit in Table 44-1 or Table 44-2 of this section and that exceeds such a limit;

(B) On a daily basis, the combustion temperature, inlet and exhaust gas temperatures and control device efficiency, as appropriate, pursuant to subsection (d)(6) of this section;

(C) Daily hours of control equipment operation;

(D) All maintenance performed on control equipment including the date and type of maintenance; and

(E) Records documenting that such equipment is operated in compliance with the control and capture efficiency requirement of subsection (d)(6) of this section.

(3) All records made to determine compliance with this section shall be maintained on the premises for five years from the date such record is created and shall be made available to the Commissioner within 90 days of a request.

(4) For adhesives, sealants, adhesive primers and sealant primers subject to the laboratory testing exemption of subsection (c)(1)(A) of this section, the person conducting the testing shall make and maintain records of all such adhesives, sealants, primers and solvents used in the preparation or evaluation process, including, as appropriate, the product name, manufacturer and description.

(5) Upon written notice, the Commissioner may require any person subject to this section to report information sufficient to determine compliance with the applicable requirements of this section.

(6) Any document submitted to the Commissioner pursuant to this section shall include a certification signed by an individual identified in section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and each of whom shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.''

(g) **Container labeling.**

(1) As of January 1, 2009, each manufacturer of an adhesive, sealant, adhesive primer or sealant primer subject to a VOC content limit in Table 44-1 of this section

shall display the following information on the container or label for such adhesive, sealant, adhesive primer or sealant primer:

(A) The category name of the product;

(B) A statement of the manufacturer's recommendation regarding thinning, reducing or mixing, provided:

(i) A statement is not required for thinning, reducing or mixing with water, and

(ii) If thinning prior to use is not necessary, the recommendation shall specify that the product is to be applied as supplied;

(C) The maximum or the actual VOC content as supplied, displayed in grams of VOC per liter of product; and

(D) The maximum or the actual VOC content as applied in accordance with the manufacturer's recommendation regarding thinning, reducing or mixing, displayed in grams of VOC per liter of applied product.

(2) The VOC content of an adhesive, sealant, adhesive primer or sealant primer shall be calculated using the manufacturer's formulation data or determined using the calculations, procedures and test methods in subsection (e) of this section.

(3) Any person applying an adhesive, sealant, adhesive primer or sealant primer subject to a VOC content limit in Tables 44-1 or 44-2 of this section may rely on the manufacturer's representation on the container or label, if such product is applied as recommended for a use specified on the container or label.

Table 44-1. As Applied VOC Content Limits for Adhesives, Sealants, Adhesive Primers and Sealant Primers

Adhesive, sealant, adhesive primer or sealant primer category	As applied VOC content limit (grams VOC per liter)	Date on which standard applies
Adhesives		
ABS welding	400	January 1, 2009
Ceramic tile installation	130	January 1, 2009
Computer diskette jacket manufacturing	850	January 1, 2009
Contact bond	250	January 1, 2009
Cove base installation	150	January 1, 2009
CPVC welding	490	January 1, 2009
Indoor floor covering installation	150	January 1, 2009
Metal-to-elastomer molding or casting	850	January 1, 2009
Multipurpose construction	200	January 1, 2009
Nonmembrane roof installation or repair	300	January 1, 2009
Plastic cement welding	510	January 1, 2009
Outdoor floor covering installation	250	January 1, 2009
PVC welding	510	January 1, 2009
Single-ply roof membrane installation or repair	250	For 2009: June 1 through August 31; For 2010 & 2011: May 1 through September 30; and On and after January 1, 2012.
Structural glazing	100	January 1, 2009
Thin metal laminating	780	January 1, 2009
Tire retread	100	January 1, 2009
Perimeter bonded sheet vinyl flooring installation	660	January 1, 2009
Waterproof resorcinol glue	170	January 1, 2009
Sheet-applied rubber installation	850	January 1, 2009
Sealants		
Architectural	250	January 1, 2009
Marine deck	760	January 1, 2009
Nonmembrane roof installation or repair	300	January 1, 2009
Roadway	250	January 1, 2009
Single-ply roof membrane	450	For 2009: June 1 through August 31;

		For 2010 & 2011: May 1 through September 30; and On and after January 1, 2012.
Other	420	January 1, 2009
Adhesive primers		
Automotive glass Plastic cement welding	700 650	January 1, 2009 January 1, 2009
Single-ply roof membrane	250	For 2009: June 1 through August 31; For 2010 & 2011: May 1 through September 30; and On and after January 1, 2012.
Traffic marking tape	150	January 1, 2009
Other	250	January 1, 2009
Sealant primers		
Non-porous architectural	250	January 1, 2009
Porous architectural	775	January 1, 2009
Marine deck	760	January 1, 2009
Other	750	January 1, 2009

Table 44-2. As Applied VOC Content Limits for Adhesives Applied to the Listed Substrate

Substrate	As applied VOC content limit (grams VOC per liter)
Flexible vinyl	250
Fiberglass	200
Metal	30
Porous material	120
Rubber	250
Other substrates	250

(Adopted effective October 3, 2008)

Secs. 22a-174-45—22a-174-99. Reserved

Indirect Sources of Air Pollution

Sec. 22a-174-100. Permits for construction of indirect sources

(a) **Definitions.** As used in this section:

(1) ''Indirect source of air pollution'' means, notwithstanding the definition of ''indirect source'' in section 22a-174-1 of the Regulations of Connecticut State Agencies:

(A) Any new highway on a new location in the state highway system, except projects for bridge replacement or elimination of railroad crossing hazards,

(B) Any new expressway interchange service added to the state highway system, or

(C) Any new lane, greater than one mile in length and connecting either signalized intersections or expressway interchanges, added to the state highway system; and

(2) ''State highway system'' means ''state highway system'' as that term is described in sections 13a-14 and 13a-15 of the Connecticut General Statutes.

(b) **Applicability and applications for indirect construction permits**.

(1) No person shall construct, modify, install or cause the construction, modification or installation of any indirect source of air pollutants or part thereof unless such person has either applied for and obtained an indirect source permit from the commissioner pursuant to this section or proceeded in compliance with subsection (i) of this section. Any indirect source permit application pending before the commissioner on the effective date of this section may be withdrawn and the owner or operator may either re-submit such application or proceed in accordance with subsection (i) of this section.

(2) Application for an indirect source permit shall be made by the owner or operator of the proposed indirect source on forms provided by the commissioner. Each application shall include siting information; descriptions of the structures, facilities or installations involved; the nature, source and quantity of uncontrolled and controlled emissions; traffic flow information; the proximity of the indirect source to existing and projected transportation services; and any other information the commissioner may require.

(3) No new or modified indirect source shall be exempt from the requirements of this section because of a division of ownership or because of the pattern or timing of development.

(4) Construction or modification shall be deemed to have commenced for any portion of an indirect source when site preparation, including clearing and grading is complete and the following three steps have been completed:

(A) Detailed plans of the proposed indirect source are available and have received all necessary federal, state or local approvals;

(B) Environmental impact statements have been prepared and reviewed as required by federal or state statutes, regulations or procedures; and

(C) The installation of structural components or materials has started as part of a continuous program of construction.

(c) **Standards for granting indirect source permits.**

(1) The commissioner shall not grant an indirect source permit unless the applicant has submitted an application consisting of:

(A) A transportation system level review to determine the proposed indirect source is:

(i) a part of a regional or statewide plan deemed to be in conformance with the most current federally approved state implementation plan, or

(ii) a part of a plan deemed to be in non-conformance with the state implementation plan, but determined to be exempt for the non-conformance restrictions placed on that plan; and

(B) A project level review to determine that:

(i) for each intersection impacted by the proposed indirect source no violation of the applicable carbon monoxide standard as set forth in section 22a-174-24(i) of the Regulations of Connecticut State Agencies will occur where such violation does not exist at the time of permit application, or

(ii) where a violation of the applicable carbon monoxide standard as set forth in section 22a-174-24(i) of the Regulations of Connecticut State Agencies does occur

at the time of permit application, the proposed indirect source will not increase ambient concentrations of carbon monoxide by more than 0.25 parts per million.

(2) An indirect source permit application shall be made in a format specified by the commissioner and shall contain any other information required by the commissioner.

(d) **Actions on applications for indirect source permits.**

(1) The commissioner shall not approve or deny an application for an indirect source permit until:

(A) The commissioner has determined that the applicant has submitted a complete application;

(B) The applicant causes to be published a notice of application of the indirect source permit in the region in which the proposed indirect source will be located;

(C) The applicant has made available for at least thirty (30) calendar days, in the region in which the proposed indirect source will be located, a copy of the indirect source permit application for public inspection and comment; and

(D) The applicant submits to the commissioner an affidavit certifying that the conditions of subparagraphs (A) through (C) of this subdivision have been met.

(2) The commissioner shall notify an applicant for an indirect source permit of the commissioner's decision to approve or deny the permit within thirty (30) calendar days of the close of the public comment period specified in subdivision (1)(C) of this subsection unless a public informational meeting is held under subsection (g)(4) of this section. The commissioner may, on notice to the applicant, extend the time for acting on the application an additional thirty (30) calendar days, to a total time of sixty (60) calendar days.

(e) **Revocation, modification and expiration of indirect source permits.**

(1) The commissioner may revoke or modify an indirect source permit if:

(A) Prior to the commencement of construction or modification authorized by the permit,the commissioner determines the new or modified indirect source is in non-compliance with the conditions of the permit; or

(B) The construction or modification authorized by the permit is not begun within five years from the date of issuance of the indirect source construction permit,or such other period as is specified in the permit; or

(C) During construction or modification, work is suspended for one year or more, or for such other period as is specified in the permit.

(2) For the purposes of subdivision (1)(B) and (C) of this subsection, if by order of a court of competent jurisdiction the construction or modification authorized by the permit is not begun or is suspended, then the period of such court-ordered delay shall not be included in the time period specified in the permit.

(3) For the purposes of subdivision (1)(B) of this subsection, if construction of the new or modified indirect source will not commence within the time period specified in the indirect source permit, the holder of such permit shall apply for renewal of the permit prior to commencing construction.

(4) The commissioner may place an expiration date within any permit issued pursuant to this section. Such expiration date may not exceed five (5) years from the date of permit issuance.

(f) **Transfer and renewal of indirect source permits.**

(1) Any permit issued under this section shall be transferred in accordance with the provisions of section 22a-6o of the Connecticut General Statutes.

(2) Any permit issued pursuant to this section and containing an expiration date may be renewed by filing a request for renewal in a manner prescribed by the

commissioner at least ninety (90) calendar days prior to the expiration date of such permit.

(3) Notwithstanding subdivision (2) of this subsection, the commissioner may not require the renewal of an indirect source permit issued under this section unless such indirect source no longer conforms with plans, specifications or other information submitted to the commissioner under subsection (c) of this section.

(4) In lieu of renewal in accordance with subdivision (2) of this subsection, the permittee may proceed in accordance with the provision of subsection (i) of this section, provided that the permittee notifies the commissioner at least ninety (90) calendar days prior to the expiration date of such permit.

(g) **Public notices and informational meetings.**

(1) The commissioner shall cause to be published, at the applicant's expense, any public notice required to be published pursuant to subsection (d)(1)(B) of this section.

(2) The commissioner shall inform the public of:

(A) All indirect source permit applications received; and

(B) Any decision to approve, deny, revoke or modify an indirect source permit.

(3) Any person may file written comment on any indirect source permit application during the public comment period or at a public informational meeting if one is held.

(4) The commissioner may hold a public informational meeting on an indirect source permit application or a proposed alternative to such permit application under subsection (i) of this section either at the discretion of the commissioner or following receipt of a request for a public informational meeting by twenty-five (25) or more people or an association representing twenty-five (25) or more people.

(5) Following the close of the public informational meeting, the commissioner shall make a decision as to whether to approve or deny the indirect source permit application.

(h) **Signature.**

Notwithstanding the provisions of section 22a-174-2a of the Regulations of Connecticut State Agencies, no indirect source permit issued under this section shall be effective until the applicant or a duly authorized representative of the applicant signs the permit. Such signature shall constitute an agreement to abide by the terms and conditions set forth in such permit.

(i) **Alternative means of compliance.**

(1) In lieu of the requirements set forth in subsections (a) through (h) of this section, the owner or operator of a proposed indirect source may comply with the provisions of this subsection.

(2) The owner or operator of the proposed indirect source shall prevent any idling of diesel engines during the construction or modification of such indirect source in accordance with the provisions of section 22a-174-18 of the Regulations of Connecticut State Agencies.

(3) In order to qualify for the alternative compliance provisions set forth in this subsection, the owner or operator of the proposed indirect source shall:

(A) Conduct all required conformity determinations for transportation plans, transportation improvement plans and Federal Highway Administration and Federal Transit Administration projects according to the requirements of 40 CFR Part 93, as may be amended;

(B) Determine consistency of transportation plans and transportation improvement programs with any applicable motor vehicle emissions budgets in the state implementation plan for air quality by performing regional emissions analyses for

all non-attainment and maintenance areas for ozone, carbon monoxide and particulate matter; and

(C) Conduct local scale carbon monoxide and particulate matter emissions and ambient impact analyses on intersections within the project area identified by the commissioner for the following project types:

(i) Projects requiring National Environmental Policy Act or Connecticut Environmental Policy Act documentation;

(ii) Projects involving:

(I) any new highway on a new location in the state highway system, except projects for bridge replacement or elimination of railroad crossing hazards,

(II) any new expressway interchange service added to the state highway system, or

(III) any new lane, greater than one mile in length and connecting either signalized intersections or expressway interchanges, added to the state highway system; and

(iii) Any project location identified in the applicable state implementation plan for air quality as sites of violation or possible violation of a national or state ambient air quality standard.

(4) The commissioner shall approve, in writing, an owner or operator of an indirect source to proceed under this subsection only after such owner or operator has demonstrated to the commissioner's satisfaction that the construction or modification of such indirect source will proceed in accordance with the provisions of this subsection and in accordance with the provisions of the Connecticut Department of Transportation's Procurement related document contained in the Bid Specification/ Request for Proposal ''*Notice to Contractor – Diesel Vehicle Emission Controls*'', or addendum notice. The commissioner may verify compliance with this subsection through periodic inspection or other required documentation. If the commissioner determines the owner or operator of the indirect source is in noncompliance with this subsection, such owner or operator shall be in violation of this section and deemed to have been constructing or operating an indirect source without an indirect source permit.

(Effective August 1, 1983; amended June 30, 2006)

Secs. 22a-174-101—22a-174-199. Reserved

Sec. 22a-174-200. Deactivation of air pollution control systems or mechanisms from motor vehicles

(a) ''Air pollution control system or mechanism'' means a system or mechanism installed on a motor vehicle for the purpose of reducing emissions of carbon monoxide, exhaust hydrocarbons, evaporative hydrocarbons, or oxides of nitrogen. The term includes, but is not limited to, mechanisms such as positive crankcase ventilation (PCV) systems; exhaust-gas-recirculation systems; choke control systems; air preheating systems; spark-advance-control systems; air injection systems or bleeds to either exhaust or intake manifolds; parts which regulate air-fuel ratios for fuel-injection or carburetion systems; fuel vapor collection and recycling systems for fuel tanks, carburetors, air filters, and other points of fuel vapor loss; catalytic converters; and any other systems or mechanisms referred to in the technical literature of the vehicle manufacturer by the terms ''air pollution device,'' ''emission control system,'' or similar designation.

(Effective August 1, 1983)

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Solid Waste Permit Fee

Solid waste permit fee regulations. 22a-208a-1

Solid Waste Permit Fee

Sec. 22a-208a-1. Solid waste permit fee regulations

(a) **Definitions.** For the purposes of this Regulation,

(1) ''Alter'' means ''alter'' as defined in subsection (d) of section 22a-208a of the General Statutes.

(2) ''Annual fee'' means any annual fee required under section 22a-208a of the General Statutes.

(3) ''Applicant'' means a person that submits an application to the Commissioner.

(4) ''Application'' means an application submitted to the Commissioner for issuance, renewal, amendment or transfer of an individual solid waste permit or authorization to conduct a regulated activity under section 22a-208a of the General Statutes.

(5) ''Asbestos'' means ''asbestos'' or ''asbestos-containing material'' as defined in section 19a-332 of the General Statutes.

(6) ''Biomedical waste'' means ''biomedical waste'' as defined in section 22a-207 of the General Statutes.

(7) ''Biomedical waste generator'' means ''generator of biomedical waste'' as defined in section 22a-207 of the General Statutes.

(8) ''Biomedical waste transporter'' means a person engaged in the transportation of biomedical waste by air, rail, highway, or water.

(9) ''Biomedical waste treatment facility'' means ''biomedical waste treatment facility'' as defined in section 22a-207 of the General Statutes.

(10) ''Bulky waste'' means land clearing debris and waste resulting directly from demolition activities other than clean fill.

(11) ''Clean wood'' means any wood which is derived from such products as pallets, skids, spools, packaging materials, bulky wood waste, or scraps from newly built wood products, provided such wood is not treated wood as defined in section 22a-209a of the General Statutes or demolition wood.

(12)''Commissioner'' means the ''commissioner'' as defined in subsection (b) of section 22a-2 of the General Statutes.

(13) ''Construction and demolition waste'' means the waste building materials or packaging resulting from construction, remodeling, repair or demolition operations on houses, commercial buildings, and other structures, excluding asbestos, clean fill as defined in regulations adopted under section 22a-209 of the general statutes, or solid waste containing greater than de minimis quantities, as determined by the commissioner of environmental protection, of (A) radioactive material regulated pursuant to section 22a-148 of the general statutes, (B) hazardous waste as defined in section 22a-115 of the general statutes, and (C) liquid and semi-liquid materials including but not limited to adhesives, paints, coatings, sealants, preservatives, strippers, cleaning agents, oils and tars.

(14) ''Construction and demolition waste processing facility'' means a volume reduction plant, the operations of which involve solely the reduction in volume of construction and demolition waste generated elsewhere.

(15) ''Department'' means the Department of Environmental Protection.

(16) ''Disposal'' means ''disposal'' as defined in section 22a-207 of the General Statutes.

(17) ''Horizontal expansion'' means the lateral expansion of a solid waste disposal area authorized under section 22a-208a of the General Statutes.

(18) ''Intermediate processing center'' means a facility which can recycle an item or items and market or deliver for reuse the resulting material product or products. Such facilities may be owned by public or private entities or combinations thereof and may offer service on a state, regional, municipal or submunicipal level.

(19) ''Land clearing debris'' means trees, stumps, branches, or other wood generated from clearing land for commercial or residential development, road construction, routine landscaping, agricultural land clearing, storms, or natural disasters.

(20) ''Land clearing/clean wood processing facility'' means a volume reduction plant, the operations of which involve solely the reduction in volume of land clearing debris or clean wood generated elsewhere.

(21) ''Minor change'' means any change in the facility design, capacity, practice, process or equipment which, in the judgment of the Commissioner, would not significantly alter the nature of the facility or its impact on the environment.

(22) ''Municipality'' means ''municipality'' as defined in section 22a-207 of the General Statutes.

(23) ''Municipal solid waste'' means ''municipal solid waste'' as defined in section 22a-207 of the General Statutes.

(24) ''Person'' means ''person'' as defined in subsection (c) section 22a-2 of the General Statutes.

(25) ''Residue'' means bottom ash, air pollution control residue, and other residues from the combustion process at resources recovery facilities, wood-burning facilities, municipal solid waste incinerators, and biomedical waste incinerators.

(26) ''Resources recovery facility'' means ''resources recovery facility'' as defined in section 22a-207 of the General Statutes.

(27) ''Sludge processing facility'' means a volume reduction plant, the operations of which involve solely the reduction in volume of water treatment, sewage treatment or industrial sludge generated elsewhere.

(28) ''Solid waste'' means ''solid waste'' as defined in section 22a-207 of the General Statutes.

(29) ''Solid waste facility'' means ''solid waste facility'' as defined in section 22a-207 of the General Statutes.

(30) ''Solid waste disposal area'' means ''solid waste disposal area'' as defined in section 22a-207 of the General Statutes.

(31) ''Source-separated organic material composting facility'' means land, including structures and appurtenances thereon, where the composting of organic material that has been separated at the point or source of generation from non-organic material, takes place. For purposes of this section ''organic material'' means substances composed primarily of carbon and nitrogen, including but not limited to food scraps, food processing residue, soiled or unrecyclable paper and yard trimmings.

(32) ''Special waste'' means the following waste, so long as it is not hazardous waste pursuant to section 22a-115 of the General Statutes or radioactive material subject to section 22a-148 of the General Statutes: (1) water treatment, sewage treatment or industrial sludges, liquids, solids and contained gases; fly-ash and casting sands or slag; and contaminated dredge spoils; (2) scrap tires; (3) bulky waste; (4) asbestos; (5) residue; and (6) biomedical waste.

(33) ''Transfer Station'' means ''transfer station'' as defined in section 22a-207 of the General Statutes.

(34) ''Vertical expansion'' means an expansion of an existing solid waste disposal area such that future disposal of municipal solid waste will take place only where solid waste has previously been disposed of and is still present.

(35) ''Volume reduction plant'' means ''volume reduction plant'' as defined in section 22a-207 of the General Statutes.

(36) ''Yard trimmings'' means leaves, grass clippings, weeds, branches up to one (1″) inch in diameter and prunings from yards or gardens.

(b) **Fee for an Application for a Permit to Construct a Solid Waste Facility**. The fee for an application for a permit to construct a solid waste facility is as follows:

(1) Resources recovery facility: $92,000.00

(2) Transfer station

(A) If the facility's capacity as designed is no more than 75 tons per day: $5,000.00

(B) If the facility's capacity as designed is 75 to 150 tons per day: $6,500.00

(C) If the facility's capacity as designed is greater than 150 tons per day: $7,500.00

(3) Volume reduction plant (other than a resources recovery facility)

(A) Intermediate processing center: $9,500.00

(B) Source-separated organic material composting facility with a capacity as designed of no more than 100 tons per day: $5,000.00

(C) Source-separated organic material composting facility with a capacity as designed of greater than 100 tons per day: $6,500.00

(D) Construction and demolition waste processing facility with a capacity as designed of no more than 100 tons per day: $5,000.00

(E) Construction and demolition waste processing facility with a capacity as designed of greater than 100 tons per day: $9,500.00

(F) Land clearing/clean wood processing facility: $6,500.00

(G) Sludge processing facility: $5,000.00

(H) Other volume reduction facilities with a capacity as designed of no more than 100 tons per day: $6,500.00

(I) Other volume reduction facilities with a capacity as designed of greater than 100 tons per day: $9,500.00

(4) Biomedical waste treatment facility: $12,500

(5) Solid waste disposal area

(A) Municipal solid waste disposal area: $25,000.00

(B) Residue or other solid waste disposal area: $17,500.00

(c) **Fee for Application for Authorization to Conduct a Regulated Activity.** The fee for an application to conduct a regulated activity other than an activity covered in subsection (b) of this section is as follows:

(1) Biomedical waste transporter: $1,000.00

(2) Disposal of asbestos by persons other than a homeowner disposing of asbestos which originates from his primary residence: $160.00

(3) Disposal of special waste by persons other than a homeowner disposing of special waste which originates from his primary residence: $350.00

(4) Solid waste disposal area as-built closure plan (active site pursuant to permit authorized under section 22a-208a of the General Statutes): $325.00

(5) Solid waste disposal area closure plan (inactive site): $2,500.00

(d) **Fee for Application to Renew a Permit to Operate a Solid Waste Facility**. The fee for an application to renew a permit to operate a solid waste facility is as follows:

(1) Resources recovery facility: $750.00

(2) Transfer station: $350.00

(3) Volume reduction plant (other than a resources recovery facility)

(A) Source-separated organic material composting facility: $175.00

(B) Any other volume reduction plant: $350.00

(4) Biomedical waste treatment facility: $350.00

(e) **Fee for application to amend a permit to construct or operate a solid waste facility.** The fee for an application to amend a permit to construct or to operate a solid waste facility is as follows:

(1) Amendment to authorize a minor change

(A) Solid waste disposal area: $750.00

(B) All other solid waste facilities: $500.00

(2) Amendment to authorize a change that is not minor

(A) Amendment to authorize a change proposed solely to satisfy a new requirement in state or federal statute, regulation, permit or order: twenty-five (25) percent of the fee specified in subsection (b) of this section for an application for a permit to construct or operate the subject solid waste facility, up to a maximum fee of $7,500.00.

(B) Amendment to authorize a change to any substantive degree in (i) the approved design, capacity, process or operation of a solid waste facility holding a permit to construct, and includes but is not limited to a change in the approved capacity or composition of solid waste disposed of, processed, reduced, stored or recycled at the subject solid waste facility, or (ii) the existing design, capacity, volume, process or operation of a solid waste facility not holding a permit to construct and includes but is not limited to a change in the volume or composition of solid waste disposed, stored, processed, reduced or recycled at the subject solid waste facility: fifty (50) percent of the fee specified in subsection (b) in this section for an application to construct or operate such facility, up to a maximum fee of $20,000.00.

(f) **Fee for an application to transfer a solid waste facility permit.** The fee for an application to transfer a permit to construct or operate a solid waste facility is $500.00.

(g) **Annual fee for Solid Waste Facilities.** The annual fee for a solid waste facility is as follows:

(1) Resources recovery facility: $2,750.00

(2) Transfer station

(A) If the facility's capacity as designed is no more than 75 tons per day: $400.00

(B) If the facility's capacity as designed is 75 to 150 tons per day: $800.00

(C) If the facility's capacity as designed is greater than 150 tons per day: $1,500.00

(3) Volume reduction plant (other than a resources recovery facility)

(A) Source-separated organic material composting facility with a capacity as designed of no more than 100 tons per day: $450.00

(B) Source-separated organic material composting facility with a capacity as designed of greater than 100 tons per day: $1,000.00

(C) Any other volume reduction plant with a capacity as designed of no more than 100 tons per day: $900.00

(D) Any other volume reduction plant with a capacity as designed of greater than 100 tons per day: $2,000.00

(4) Biomedical waste treatment facility: $2,250.00

(5) Biomedical waste generators. Each biomedical waste generator who generates fifty (50) pounds or more of biomedical waste in any calendar month during the calendar year shall report to the Commissioner in writing the amount of biomedical waste actually generated during such year and pay an annual fee of $50.00 within sixty (60) days of the end of such calendar year.

(6) Solid waste disposal areas

(A) Municipal solid waste: $2,500.00

(B) Residue: $2,500.00

(C) Special waste or bulky waste: $1,800.00

(h) **General Payment Terms and Conditions.**

(1) **Time and Method of Payment.** Any fee required by this section shall be submitted simultaneously with the application to which it relates. Any annual fee required by this section shall be submitted to the Commissioner each year on or before July first. Fees shall be paid by certified check or money order payable to the Department of Environmental Protection and shall state on its face, ''Waste Management Permit Fee,'' ''Waste Management Annual Fee'' or ''Waste Management Fee'' as appropriate, and reference the relevant permit number, application number or invoice number as appropriate.

(2) **Prohibition of Review.** The Commissioner shall not review an application unless all fees required by this section have been paid in full.

(3) **Municipal Fee.** Pursuant to subsection (b) of section 22a-6 of the General Statutes, a municipality shall be liable for fifty (50) percent of any fee required by this section.

(4) **Late Fees.** Any person who pays an annual fee after the date required by subdivision (1) of this subsection shall pay an additional fee of ten (10) percent of such annual fee, plus one and one quarter percent per month or part thereof that the annual fee was late.

(5) **Fee Increases.** If while an application is pending the applicant amends such application so as to cause an increase in the fee required by this section, the applicant shall submit the amount of such increase simultaneously with the application amendment. This subsection shall not apply to an amendment of an application submitted prior to the effective date of this regulation, provided by that date, (A) the application was complete and included all information required by statute, regulation or the Commissioner and (B) all legally required fees were paid.

(6) **Refunds.**

(A) Except as otherwise provided in this section, no fee submitted under this section shall be refunded.

(B) If, (i) an application for a permit is submitted and the Commissioner determines that such permit is legally unnecessary, or (ii) while an application is pending but before the Commissioner has issued notice of tentative determination under section 22a-6h of the General Statutes the applicant amends such application so as to cause a decrease in the fee required by this section, the Commissioner shall retain fifty (50) percent of the fee paid or the reasonable costs of reviewing said application, whichever is greater. The Commissioner shall recommend to the Comptroller, in accordance with the provisions of section 22a-10 of the General Statutes, the amount of the fee that should be refunded to the applicant.

(C) If an applicant files an application for an individual permit and submits the fee required by this section for such application and (i) the activity that is the subject of such application is one which is covered by a general permit that the Commissioner has issued under subsection (q) of section 22a-208a of the General Statutes, (ii) such fee is greater than the fee which would be required to seek authorization under such general permit, (iii) the Commissioner notifies the applicant that he should withdraw such application and seek authorization under such general permit, and (iv) the applicant withdraws such application and seeks authorization under such general permit, the Commissioner shall retain the general permit fee from the fee paid. The Commissioner shall recommend to the Comptroller, in accordance with

the provisions of section 22a-10 of the General Statutes, the amount of the fee that should be refunded to the applicant.

(i) **Severability clause.** If any section, subsection, paragraph, clause, phrase, word or provision of this section shall be adjudged invalid or held unconstitutional, the same shall not affect the validity of this section as a whole or any part or provision hereof other than the part so adjudged to be invalid or unconstitutional.

(Effective September 23, 1996)

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Composting of Leaves

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Composting of Leaves

Sec. 22a-208i (a)-1. Composting of leaves

(a) **Applicability**

(1) This section applies to any person who owns or operates a leaf composting facility.

(2) No person shall be exempt by virtue of compliance with this section from applicable local, state and federal laws.

(b) **Definitions**

As used in this section:

(1) ''Compost pad'' means a cleared, graded surface within a leaf composting facility upon which windrows are placed for composting.

(2) ''Existing leaf composting facility'' means a leaf composting facility at which leaf composting took place before the effective date of this regulation.

(3) ''Home composting'' means the accelerated aerobic biodegradation and stabilization of vegetative organic solid waste generated by a homeowner or tenant of a single or multi-family residential unit when composting occurs at such residence.

(4) ''Leaf'' or ''leaves'' means the foliage of trees.

(5) ''Leaf composting'' or ''composting of leaves'' means the accelerated aerobic biodegradation and stabilization of leaves under controlled conditions.

(6) ''Leaf composting facility'' means land, including structures and appurtenances thereon, other than home composting areas, where leaf composting takes place.

(7) ''Leaf compost'' means the product of leaf composting.

(8) ''New leaf composting facility'' means a leaf composting facility at which leaf composting did not take place prior to the effective date of this section.

(9) ''Operator'' means the person with ultimate responsibility for managing a leaf composting facility.

(10) ''Owner'' means a person that owns a leaf composting facility.

(11) ''Sheet leaf composting'' means the application of leaves to land for use as a soil amendment or mulch.

(12) ''Surface water'' means ''surface water'' as defined in section 22a-430-3 (a) of the Regulations of Connecticut State Agencies.

(13) ''Windrow'' means an elongated pile of leaves formed for the purpose of composting.

(14) The definitions of the following terms shall be the same as the definitions in section 22a-2 of the Connecticut General Statutes: ''Commissioner,'' ''Department,'' ''person.''

(15) The definition of the following term shall be the same as the definition in section 12-412 (63) of the Connecticut General Statutes: ''agricultural production.''

(c) **Registration**

(1) (A) Before commencing leaf composting, an owner or operator of a new leaf composting facility shall register such facility with the Commissioner and obtain from the Commissioner a notice that such registration is complete. An owner or operator of an existing leaf composting facility shall register such facility with the Commissioner within ninety days after the effective date of this section.

(B) Notwithstanding the provisions of subparagraph (A) of this subdivision, an owner or operator of a leaf composting facility shall be considered in compliance with this subsection if, by the effective date of this regulation, (i) such owner or operator has submitted to the Commissioner the information set out in subparagraph

(A) through (J) of subdivision (2) of this section, and such owner or operator does not receive written notice from the Commissioner that the information so submitted is incomplete, or (ii) the Commissioner has issued to such owner or operator a permit pursuant to Section 22a-208a of the General Statutes and such permit was in effect on the effective date of this section. An owner or operator to whom or to which the Commissioner has issued such a permit shall register such facility with the Commissioner within ninety days after the expiration of the permit.

(2) A registration for a leaf composting facility shall include the following information with respect to such facility:

(A) Name, business address, and business telephone number of the facility's owner and the operator and of the owner of the land on which the facility is located;

(B) Location of the facility;

(C) Acreage of the property on which the facility is located;

(D) Volume of leaves composted or expected to be composted annually;

(E) acreage of area used or to be used for a compost pad, leaf processing activities, and storage of leaf compost;

(F) Individual to be the primary contact with the Department;

(G) Name, business address, and business telephone number of any engineer or other consultant employed or retained to design and/or oversee construction of and/or operate the facility;

(H) A detailed site plan and supporting maps showing, but not necessarily limited to: the boundaries of the property at which the facility is located; the existing and proposed contours and contour intervals of the property at which the facility is located and of the properties adjacent to the property at which the facility is located; all occupied buildings within 250 feet of the perimeter of the compost pad; all drinking water supply wells, monitor wells, reservoirs, and sources of water for irrigation or industrial purposes within 1000 feet of the perimeter of the compost pad; archeological or historical landmarks, wetlands, watercourses, and publicly or privately owned land conservation areas on the property at which the facility is located and within 1000 feet of the boundaries of said property; soil series description and delineation as specified by the United States Department of Agriculture Soil Conservation Service County Soil Survey of all soils on the property at which the facility is located and within 1000 feet of the boundaries of said property; any buffers, and the nature of such buffers, between the facility and adjacent properties; any means, and the nature of such means, utilized to visually screen the facility from its surroundings; all paved and unpaved access roads to the facility; all paved and unpaved roads on the property at which the facility is located; all fencing and gates on the said property; depiction of the composting operations; all structures related to the facility; source of water for the facility; any means for control of erosion, sedimentation, and stormwater; location, depth, and elevation of any soil borings, test pits, or monitor wells on the said property; elevation of seasonal high groundwater table on the said property; and direction of groundwater flow on the said property.

(I) An operation and maintenance plan setting forth, but not necessarily limited to, a description of any agreements affecting the control, use or operation of the facility; procedures for collection and delivery of leaves to the facility; procedures and processes for leaf composting; methods and procedures for fire prevention and fire control; a design for erosion, sedimentation and stormwater controls; end uses or markets for leaf compost generated at the facility; and provisions for bi-weekly record-keeping of weather conditions, wind direction, ambient air temperature, odor,

dust, condition of compost pad, windrow monitoring, and corrective actions needed and taken.

(J) Such additional information relevant to the facility as the Commissioner deems appropriate.

(3) A registration, including any attachments thereto, shall be certified by the registrant and by the individual or individuals responsible for actually preparing the registration, each of whom shall state in writing:

''I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157 of the General Statutes, and in accordance with any other applicable statute.''

The registration and one copy thereof shall be delivered personally or by mail and, unless the Commissioner requires differently, shall be directed to the Department's Bureau of Waste Management Planning and Standards Division.

(4) Each owner or operator of a registered leaf composting facility shall re-register such facility with the Commissioner, in accordance with provisions of subdivisions (3) and (4) of this subsection, if any of the following occurs:

(A) The annual volume of leaves to be composted at the facility increases by twenty per cent of the annual volume indicated in the current registration;

(B) The design of the facility, or procedures or processes for leaf composting, are modified;

(C) There is a change in the identity of the facility's owner or operator.

(5) The Commissioner may revoke or suspend a registration in accordance with applicable law.

(d) **Siting**

(1) No leaf composting facility shall be operated at any location unless at such location:

(A) There are at least 100 feet between the staging, processing, curing, and storage areas of the facility and any surface water;

(B) There are at least 100 feet between the staging, processing, curing, and storage areas of the facility and the boundaries of the property at which the facility is located;

(C) There are at least 250 feet between the staging, processing, curing, and storage areas of the facility and any occupied building other than an owner occupied building on the property at which the facility is located;

(D) There are at least five feet between the ground surface of the property at which the facility is located and the seasonal high groundwater table;

(E) There are at least five feet between the ground surface of the property at which the facility is located and the bedrock;

(F) There are at least 250 feet between the staging, processing, curing, and storage areas of the facility and any drinking water supply well;

(G) Leaf composting facilities which are located on top of solid waste disposal areas closed in accordance with Sections 22a-209-1 through 13 of the Regulations of Connecticut State Agencies and Title 40 Code of Federal Regulations Part 258.60 shall be conducted on a pad to prevent disruption of the landfill cap and underlying waste. The pad shall be constructed of well compacted, well drained soil. It shall

be no less than 2 feet thick and sloped at 2-5% to promote surface drainage. The pad shall be constructed in addition to the minimum 2 feet of final cover soil required at all closed solid waste disposal areas.

(2) Notwithstanding the provisions of subdivision (1) of this subsection, a leaf composting facility may be operated at a location which does not meet the requirements of such subdivision if the owner or operator demonstrates in writing to the Commissioner's satisfaction, and the Commissioner finds in writing, that operation of the facility at such location will not adversely affect public health, safety, welfare, or the environment.

(e) **Operation**

Each owner or operator of a leaf composting facility shall assure that:

(1) The facility is operated in accordance with the information provided in the current registration submitted under this section.

(2) If the facility is located on a solid waste disposal area, the facility is operated so as not to interfere with operations of such area or to disturb the cover of such solid waste disposal area.

(3) The facility is operated so as to prevent adverse impacts to public health, safety, welfare, and the environment.

(4) All composting takes place on a compost pad having a slope of between 2% and 5% and graded to minimize ponding.

(5) Leaves in plastic bags are de-bagged within two (2) weeks after arrival at the facility and empty plastic bags are promptly removed from the facility and lawfully disposed.

(6) Leaves are stockpiled at the facility for no longer than two weeks before the leaves are watered, processed and formed into actively composting windrows.

(7) Windrows are constructed on the compost pad perpendicular to the contours of the ground surface.

(8) Windrow layout allows access for heavy equipment.

(9) Windrow height and width is such that the leaves may be easily and thoroughly mixed by the windrow turning equipment used. In no case shall windrows exceed twelve (12) feet in height and twenty (20) feet in width at their base unless a specialized windrow turning machine is used to mix them and manufacturer specifications recommend specific size windrows.

(10) Windrows are turned as often as necessary, and at least once per month, to maintain aerobic composting conditions, prevent foul odors, and produce a compost product.

(11) Internal temperature of the windrows is measured and recorded at least once every 14 days at 50-foot intervals along the windrows. The thermometer shall be inserted into the center of the windrow when internal temperature is being measured.

(12) Adequate measures are implemented to minimize dust and fungal spore migration during operation of the facility, including during windrow turning.

(13) The following parameters are recorded at least once every two weeks and during windrow turning: weather conditions, wind direction, ambient air temperature, presence of odor or dust, compost pad condition, windrow moisture, corrective actions needed, and corrective actions taken.

(14) All appropriate sedimentation and erosion control measures are implemented and designed in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, published by the Soil and Water Conservation Council established pursuant to section 22a-328 of the Connecticut General Statutes.

(15) All drainage ditches, evaporation ponds, sedimentation ponds and swales are a sufficient distance from the windrows to prevent absorption of water by leaves or leaf compost.

(16) All interceptor berms, ditches and swales are installed upgradient of the compost pad when the compost pad is located down gradient of a slope, and surface drainage is diverted away from the compost pad.

(17) Drainage control measures are implemented to prevent run-off from the compost pad from entering surface water.

(18) Access to the facility is maintained so as to permit orderly entrance and egress at all times, including during periods of peak usage and inclement weather.

(19) Security measures are adequate to prevent unauthorized dumping and vandalism.

(20) The facility be maintained in such a manner as to prevent the creation of litter and the harboring, feeding or breeding of vectors.

(f) **Reporting**

The owner or operator of a leaf composting facility shall comply with the reporting requirements for recycling facilities pursuant to Section 22a-208e (c) of the Connecticut General Statutes.

(g) **Sheet leaf composting**

(1) Each person that practices sheet leaf composting is exempt from the requirements of subsections (c), (d), and (e) of this section, provided that such person:

(A) Has been issued an Agricultural Sales Tax Exemption Permit pursuant to chapter 219 of the Connecticut General Statutes.

(B) Complies with the reporting requirements for recycling facilities pursuant to section 22a-208e (c) of the Connecticut General Statutes.

(C) Notifies the Commissioner on a form prescribed by the Commissioner within 30 days before accepting leaves for sheet leaf composting.

(2) Any person that practices sheet leaf composting on land which he leases to another person for purposes of agricultural production shall be exempt from the requirements of subsections (c), (d), and (e) of this section if such other person satisfies the criteria of subparagraphs (A), (B), and (C) of subdivision (1) of this subsection.

(3) Each person that practices sheet leaf composting shall assure that:

(A) No material other than leaves is used for sheet leaf composting.

(B) Sheet leaf composting is conducted only at land actively devoted to agricultural production.

(C) Leaves to be used for sheet leaf composting are delivered to the subject land unbagged.

(D) Prior to application of leaves to land, any non-leaf material intermixed with the leaves is removed and properly disposed.

(E) Leaves to be utilized for sheet leaf composting are applied to land within fourteen (14) days of delivery and are spread in a layer no higher than six inches.

(F) No land receives, as a result of sheet leaf composting, more than six inches of leaves within any 12 months.

(G) All leaves applied to land are incorporated into the soil no later than the tillage season following the time the leaves were applied, unless the leaves are intended as a ground mulch.

(Effective February 16, 1994)

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Solid Waste Management

Sec. 22a-209-1. Definitions

''AASHTO specification'' means a standard of performance for buried structures set forth in ''Standard Specifications for Transportation Materials,'' published by the American Association of State Highway and Transportation Officials in 1989, 14TH edition.

''All weather access'' means that affected roads or land surface can support operation of vehicles for the transportation of solid waste and vehicles for the maintenance of solid waste facilities under all normal climatic conditions, provided that snow is removed and flooding is precluded.

''Alter'' (1) when referring to a solid waste facility which has no permit, means to change the existing configuration or method of operation of the facility in any manner, including but not limited to adding to the volume of solid waste deposited at the facility; (2) when referring to a solid waste facility which holds a permit, means to change the approved configuration or method of operation of the facility in any manner, including but not limited to adding to the approved volume of solid waste deposited at the facility.

''Asbestos'' means actinolite, amosite, antnophyllite, chrysotile, crocidolite, tremolite, or any material which contains the above, all or part of which is in a friable state.

''ASTM specification'' means a standard for pipes or other construction materials set forth in ''Annual Book of ASTM Standards,'' published by the American Society of Testing Materials in 1989.

''Base flood'' means a flood that has a one percent or greater chance of recurring in any year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period. If the Commissioner deems it necessary for a particular location, the base flood shall represent a less common occurrence as specified by him or her.

''Bird hazard'' means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

''Bulky waste'' means landclearing debris and waste resulting directly from demolition activities other than clean fill.

''Cell construction method'' means the spreading, compacting and daily covering of solid wastes through use of the area, ramp, or trench methods of landfilling.

''Certified operator'' means the solid waste facility operator or an employee of the such operator who is present on site and oversees or carries out the daily operation of the facility, and whose qualifications are approved in accordance with Section 22a-209-6 of the Regulations of Connecticut State Agencies.

''Certified soil scientist'' means a person who has been certified as a soil scientist by the Board of Directors of the Society of Soil Scientists of Southern New England.

''Clean fill'' means (1) natural soil (2) rock, brick, ceramics, concrete, and asphalt paving fragments which are virtually inert and pose neither a pollution threat to ground or surface waters nor a fire hazard and (3) polluted soil as defined in subdivision (45) of subsection (a) of section 22a-133k-1 of the Regulations of Connecticut State Agencies which soil has been treated to reduce the concentration of pollutants to levels which do not exceed the applicable pollutant mobility criteria and direct exposure criteria established in sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies and which soil is reused in accordance with R.C.S.A. subdivision (3) of subsection (h) of section 22a-133k-2 of such regulations.

''Cover material'' means soil, or other suitable material as approved by the Commissioner, which is used to cover compacted solid waste in a solid or special waste disposal area. Any soils used shall be classified as GM, silty gravels, poorly graded gravel-sand-silt mixtures; GC, clayey gravels, poorly graded gravel-sand-clay mixtures; SM, silty sands, poorly graded sand-silt mixtures; SC, clayey sands, poorly graded sand-clay mixtures; ML, inorganic silts and very fine sands, rock flour, silty or clayey fine sands with slight plasticity in accordance with the unified soil classification system.

''Dewater'' means to subject material to a process that removes water.

''Dioxin sampling well'' means a stainless steel ground water monitoring well installed within the area of predicted leachate plume from any portion of a solid waste facility at which residue is disposed.

''Facility plan'' means the engineering studies and proposals to build, establish, alter, operate, monitor and close a solid waste facility, required by Section 22a-209-4(b) (2) of the Regulations of Connecticut State Agencies.

''Floodplain'' means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, which are inundated by the base flood.

''Friable'' means readily crumbled, pulverized or reduced to powder, when dry, by hand pressure.

''Geotextile'' means a woven or nonwoven fabric or film which is utilized for the engineering management of soil and water.

''Groundwater'' means water present in the zone of saturation.

''Groundwater monitoring well'' means a dug, driven or drilled well used to determine groundwater elevation, direction of groundwater flow, or the quality of groundwater.

''Hazardous Waste'' means any waste material which may pose a present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed, including hazardous waste identified in accordance with Section 3001 of the Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) as amended.

''Leachate'' means that liquid which results from ground or surface water which has been in contact with solid waste and has extracted material, either dissolved or suspended, from the solid waste.

''Lift'' means a horizontal layer of cells within a solid waste disposal area at which the cell construction method is utilized.

''Lower explosive limit'' means the lowest percent by volume of gas which will propagate a flame in air at 25°C and atmospheric pressure.

''Maximum high water table'' means the highest elevation reached by the upper level of the ground water as determined by an engineering evaluation conducted in accordance with test methods approved by the Commissioner.

''Monocell'' means a variation of the cell construction method whereby only a single type of solid waste is disposed of in any individual cell.

''Mottling indicator'' means a residual trace of reduced or oxidized iron left on soil strata as the result of fluctuations in groundwater elevation.

''Mulch'' means a protective cover of organic material placed over soil to preserve soil moisture, prevent erosion, or promote the growth of plants.

''Municipal solid waste'' means solid waste from residential, commercial, industrial and institutional sources, excluding solid waste consisting of significant quanti-

ties of hazardous waste as defined in Section 22a-115 of the General Statutes, landclearing debris, biomedical waste, sewage sludge and scrap metal.

''Natural soil'' means soil in which all substances naturally occurring therein are present in concentrations not exceeding the concentrations of such substance occurring naturally in the environment and in which soil no other substance is analytically detectable. For the purpose of this definition, substance shall have the same meaning as in section 22a-133k-1 of the Regulations of Connecticut State Agencies.

''New municipal solid waste disposal area'' means a solid waste facility or expansion thereof, other than a vertical expansion, for the disposal of municipal solid waste, for which facility or expansion a completed application under Sections 22a-430 and 22a-208a of the General Statutes is received by the Commissioner after the effective date of Section 22a-209-14 of the Regulations of Connecticut State Agencies.

''Open dump'' means a site at which solid waste is disposed of in a manner which does not comply with Subtitle D of the Resource Conservation and Recovery Act of 1976, (42 USC 6901 et seq.), as amended, and regulations promulgated thereunder.

''Operator'' means a person who is ultimately responsible for maintaining the solid waste facility in conformance with applicable statutes and regulations and the facility permits.

''Pan lysimeter'' means a leachate collection device for sampling leachate from monocells within a solid waste disposal area.

''Person'' means any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency or political or administrative subdivision of the state, or other legal entity of any kind.

''Public airport'' means an airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

''Recharge'' means water which enters a geologic formation.

''Regional solid waste disposal area'' means a solid waste disposal area used for the disposal of solid waste generated in more than one municipality.

''Residue'' means bottom ash, air pollution control residue, and other residues from the combustion process at resource recovery facilities, municipal solid waste incinerators, and biomedical waste incinerators.

''Resources recovery facility'' means a volume reduction plant, as defined by Section 22a-207 of the General Statutes as amended, utilizing processes aimed at reclaiming the material or energy values from solid wastes.

''Rip-rap'' means a loose assemblage of broken or whole stones utilized to dissipate the velocity and energy of moving water.

''Scarification'' means the process of raking, harrowing or otherwise disturbing a soil surface to allow infiltration of water or other material.

''Solid waste boundary'' means the outermost perimeter of the solid or special waste (projected in the horizontal plane) as it would exist at completion of the permitted disposal activity at a solid waste or special waste disposal area.

''Special waste disposal area'' means a solid waste disposal area at which special wastes, as defined in this section, are disposed of.

''Special wastes'' means the following wastes, so long as they are not hazardous waste pursuant to section 22a-115 of the General Statutes or radioactive material subject to section 22a-148 of the General Statutes: (1) water treatment, sewage treatment or industrial sludges, liquid, solids and contained gases; fly-ash and casting

sands or slag; and contaminated dredge spoils; (2) scrap tires; (3) bulky waste, as defined in this section; (4) asbestos; (5) residue; and (6) biomedical waste.

''Standard proctor density'' means the maximum weight per unit volume of earthen material which has been compacted by a specific weight and procedure, at an optimum soil moisture, according to a laboratory engineering test developed by Proctor.

''State Solid Waste Management Plan'' means the State plan adopted pursuant to Section 22a-211 of the Connecticut General Statutes, as amended.

''Stormwater'' means precipitation runoff.

''Transfer station'' means a volume reduction plant, as defined by Section 22a-207 of the General Statutes, as amended, that is a central collection point for the solid waste generated within a municipality or group of municipalities, where solid wastes received are transferred to a vehicle for removal to another solid waste facility.

''Underdrainage'' means a system of pipes, structures, stone, pumps, wells, or other devices utilized to lower or divert groundwater.

''Vector'' means as insect or rodent or other animal (not human) which can transmit infectious diseases from one person or animal to another person or animal.

''Vertical expansion'' means an expansion of an existing solid waste disposal area such that future disposal of municipal solid waste will take place only where solid waste has previously been disposed of and is still present.

''Washout'' means the carrying away of solid waste by waters of the base flood.

''Water Quality Standards'' means the water quality standards and water quality Classifications Map published by the Connecticut Department of Environmental Protection, February, 1987.

''Water table'' means that surface of a body of unconfined groundwater at which the pressure is equal to that of the atmosphere.

''Working face'' means that portion of a solid waste or special waste disposal area where the waste is deposited, spread and compacted prior to the placement of cover material.

''Zone of influence'' means the area in which, assuming the absence of any means at a solid waste facility to collect or treat leachate, groundwater may be altered in quality due to discharge of leachate from any portion of such facility.

(Effective January 30, 1996)

Sec. 22a-209-2. Prohibition of open dumps

Open dumps are hereby prohibited. In addition, the disposal of solid waste in this state shall be made only through use of solid waste disposal areas, volume reduction plants, biomedical waste treatment facilities and resources recovery systems established and operated in accordance with Section 22a-207 et seq. of the General Statutes, these regulations, and with conditions and limitations specified in the solid waste facility permits.

(Effective March 21, 1990)

Sec. 22a-209-3. Applicability

These regulations apply to the operation and management of all existing and proposed solid waste facilities, and to all applications for a permit or contract approval which are submitted after or are in process on the effective date of these regulations. Areas which are solely for the disposal of clean fill shall be exempt from the provisions of these regulations.

(Effective February 21, 1985)

Sec. 22a-209-4. Permits for solid waste facilities

(a) **Permit required.** Any person, municipal authority or regional authority that builds, establishes or alters a solid waste facility after July 1, 1971, must obtain a permit pursuant to Section 22a-208 of the General Statutes unless excluded by Section 22a-209-3 of these regulations. This permit shall consist of two parts: the permit to construct and the permit to operate.

(b) **Permit to construct.** The information required to be in an application for a permit to construct shall depend upon the type of solid waste facility proposed. Such information shall be outlined in these regulations and further detailed in guidelines prepared by the Department. The information in the application must be sufficient to demonstrate the ability of the facility to comply with the requirements of these regulations. An application will not be deemed complete until all information required by statutes or regulations or otherwise requested by the Commissioner have been submitted in proper form.

(1) Application for each solid waste facility permit to construct shall be made by the owner or operator of the facility on forms furnished by the Commissioner and signed by the owner and, if the applicant is the operator, the operator, and shall include but not be limited to the following as the Commissioner deems necessary:

Information required by the Rules of Practice of the Department; name and address of the operator, owner, and, if the operator or owner is a business entity, the names and addresses of all parent and subsidiary corporations, partners, corporate officers and directors, stockholders holding more than fifty percent of the stock of the corporation; a list of all solid waste facilities which each of the above persons are or have been associated with and their positions and responsibilities; name and address of the agent for service; facility location; type of facility; type of proposal (e.g. new facility, expansion or other alteration); a list of other permits required for the facility; an explanation of how the proposal relates to the State Solid Waste Management Plan; information as to the financial stability of the applicant; a commitment to post the proper surety if required by these regulations; a copy of any lease, deed or other agreement regarding the ownership, control or use of the facility; a list of any outstanding administrative orders against the facility; a list of supporting materials submitted with the application; and any other information which the Commissioner deems necessary.

(2) A facility plan, including engineering studies and proposals, shall accompany the application and be prepared by an engineer licensed to practice in the State of Connecticut; shall contain sufficient information to demonstrate an ability to comply with these regulations; and shall include but not be limited to the following information and supporting materials as the Commissioner deems necessary and as further detailed in engineering guidelines provided by the Commissioner:

(A) For solid and special waste disposal areas:

(i) a detailed area map at a scale and contour interval approved by the Commissioner which shall depict the site and surroundings within one-half mile, noting natural and artificial features and land use; including but not limited to all structures and overhead and underground utilities and a statement by each affected utility that the proposed activity adequately protects these utilities in compliance with applicable standards;

(ii) detailed site maps at a scale and contour interval approved by the Commissioner depicting all items specified in (A) (i) above and existing, site preparation, and final grades, property boundaries, existing and proposed fill limits including

location of fill limit markers, soil boring and monitoring locations, proposed structures on site, access and site roads, fencing, buffer zones and screening;

(iii) cross sections through the site, at a minimum of one parallel and one perpendicular to ground water flow, depicting existing, site preparation and final grades and elevation and flow direction of ground water, type and structure of bedrock and type and location of soils;

(iv) supplemental maps and plans not prepared as part of the engineering study but used as reference materials for engineering and operational interpretations;

(v) hydrogeologic and geologic information including predictions of movement of and impact on surface and ground water, including water supply wells, from existing and proposed site activities, and the names and addresses of all landowners within the area of potentially impacted ground waters, detailed soil boring logs; details of monitor well construction and development, the method of testing and testing results;

(vi) operational plans suitable for field use by the operator including but not limited to details of construction, sequence of fill, a list of the type and amount of equipment and the number and responsibilities of staff, daily operations, traffic flow, controls necessary to protect the public health, safety and welfare, emergency procedures, communications equipment, regular maintenance schedules, information to be recorded and recording procedures, and methods of measuring waste, and monitoring parameters and schedule;

(vii) a discussion of expected site life and post-closure use; and

(viii) any other information which the Commissioner deems necessary.

(B) For transfer stations, resources recovery facilities or other volume reduction plants, and biomedical waste treatment facilities:

(i) all applicable information required under Section 22a-209-4 (b) (2) (A) of these regulations;

(ii) detailed drawings and specifications of site structures, all fixed and transport equipment, methods of volume reduction and storage, and a discussion of utility provision;

(iii) approximate volume of each waste type to be handled, a list of types of facility users and municipalities served, associated facilities for the ultimate disposal of the wastes, residues, and recycled materials, and contingency plans for periods of shut down or breakdown;

(iv) a copy of all facility operation and maintenance manuals, and a discussion of: OSHA requirements and how these requirements will be met, materials and energy balance as appropriate, proposed performance tests, system reliability and redundancy/backup system, operation and maintenance budget; and

(v) any other information which the Commissioner deems necessary.

(3) The Commissioner, at least thirty days before approving or denying a permit application, shall, at the applicant's expense, publish once in a newspaper having a substantial circulation in the affected area notice of the application which shall include but need not be limited to: (1) the name of the applicant, (2) the location and nature of the facility; and (3) the location where a copy of the application may be inspected. There shall be a thirty day comment period following the public notice during which period interested persons may submit written comments on the application. After the comment period, the Commissioner may hold a public hearing prior to approving or denying any application if in his or her discretion the public interest will be best served thereby, and shall hold a hearing upon receipt of a petition signed by at least twenty-five persons.

(4) The Commissioner shall consider all evidence offered at any public hearing, any reports from local, state, and federal agencies, all relevant facts and circumstances including but not limited to whether the proposed facility is consistent with the State Solid Waste Management Plan, the Connecticut Solid and Hazardous Waste Land Disposal Siting Policy and the Connecticut Water Quality Standards, and any additional requested information in making his or her determination on an application for a permit to construct. The Commissioner shall, at the applicant's expense, publish notice of a decision approving or denying the permit in a newspaper having general circulation in the municipality or municipalities where the facility is or was to be located.

(5) Conditional approvals. The Commissioner may impose any reasonable conditions upon a permit to construct.

(c) **Permit to operate.** After the effective date of these regulations, any person who operates or causes the operation of a solid waste facility must obtain a permit to operate from the Commissioner.

(1) All operating facilities which have a valid permit to construct as of the effective date of these regulations shall be issued a permit to operate and shall be allowed to continue operations prior to the issuance of such permit to operate.

(2) A permit to operate shall be issued to any new, existing or altered facility other than those specified in 22a-209-4 (c) (1), and shall be reinstated if revoked or suspended, upon a determination by the Commissioner that the facility has been constructed in accordance with the terms and conditions of the facility permit to construct and that the facility and its proposed methods of operation and maintenance are in compliance with applicable statutes and regulations.

(3) The Commissioner may impose any reasonable conditions upon a permit to operate.

(4) In circumstances where the Commissioner determines that performance tests must be conducted during actual operations, he or she may issue a temporary permit to operate for a period not to exceed sixty (60) days. For good cause shown, the Commissioner may extend the term of a temporary permit to operate for a specified period.

(d) **Issuance of a permit to construct or to operate.**

(1) The Commissioner shall issue a permit to construct or to operate upon receipt of satisfactory evidence from the applicant that:

(A) the solid waste facility will be constructed and operated in compliance with applicable statutes and regulations;

(B) the operation of the facility is consistent with the State Solid Waste Management Plan if required by statute, including but not limited to Sections 7-273bb, 22a-211 and 22a-260 through 22a-281 of the General Statutes, as amended;

(C) if the application regards an existing facility, the present construction and operation of that facility is in full compliance with pertinent statutes, regulations, orders and existing permit terms and conditions; and

(D) the owner or operator of the facility or, if the owner or operator is a business entity, a parent or subsidiary corporation, partner, corporate officer or director, or stockholder holding more than fifty percent of the stock of the corporation has not repeatedly violated pertinent statutes, regulations, orders or permit terms or conditions at any solid waste facility.

(2) In making a decision on a permit application, the Commissioner shall consider all factors which he or she deems relevant, including but not limited to whether the facility proposed is consistent with the Solid and Hazardous Waste Land Disposal

Siting Policy, the Connecticut Water Quality Standards and the State Solid Waste Management Plan.

(3) Notice of denial of a permit to construct or to operate shall set forth the reasons for the action taken.

(e) **Receipt of permit.** Any person who begins site preparation or construction of a solid waste facility after receiving a permit to construct, and any person who operates a solid waste facility after receiving a permit to construct and a permit to operate shall immediately comply with the terms and conditions of the permit(s).

(f) **Minor permit amendments.** The Commissioner may amend a permit to construct or to operate, without hearing, for minor changes in the facility design, practices or equipment that would not in his or her judgment significantly change the nature of the facility or its impact on the environment.

(g) **Transferability.** A permit to construct or to operate may not be transferred without prior written permission from the Commissioner. A request for permit transfer shall be made on a form provided by the Commissioner and shall include but need not be limited to all information required by subsection (b) (1) of this section, and proof of certification of the proposed operator. The Commissioner shall approve a permit transfer upon receipt of satisfactory evidence from the transferee that:

(1) the solid waste facility will be constructed, if applicable, and operated in compliance with applicable statutes and regulations;

(2) if the application regards an existing facility, the present construction and operation of that facility is in full compliance with pertinent statutes, regulations, orders and existing permit terms and conditions or the transferee makes a written commitment to bring the facility into compliance in accordance with a schedule approved by the Commissioner; and

(3) the owner or operator of the facility or, if the owner or operator is a business entity, a parent or subsidiary corporation, a partner, corporate officer or director, stockholder holding more than fifty percent of the stock of the corporation, has not repeatedly violated pertinent statutes, regulations, orders, or permit terms or conditions at any solid waste facility.

(h) **Revocation, suspension or modification of a permit to construct or to operate.**

(1) A permit to construct or to operate may be revoked, suspended, or modified (A) for failure to comply with the terms of the permit or with any applicable statute or regulation, (B) if the permit was issued in reliance upon incorrect information supplied by the permittee or his or her agent, or (C) if additional information becomes available which indicates that the operation and management, or the engineering of the facility as outlined in the original application and permit to construct is insufficient to maintain the facility in compliance with applicable statutes and regulations. Any permittee or his or her agent who acquires knowledge of such incorrect or additional information must inform the Commissioner in writing of the information within thirty (30) days.

(2) Notice of modification of a permit to construct or to operate shall set forth the reasons for the action taken.

(3) A permit to construct or to operate may be revoked or suspended in accordance with Section 4-182 of the General Statutes and the Rules of Practice of the Department, as amended.

(i) **Closure surety for solid or special waste disposal areas.**

(1) The owner or operator of a privately owned solid or special waste disposal area shall post a bond or other surety with the Commissioner to cover the cost of

properly closing the area at any time required in accordance with these regulations and to cover the cost of thirty (30) year post-closure gas and water monitoring if required. The provisions of 40 CFR Sections 264.141 to 264.143 inclusive and 40 CFR Section 264.151, as they exist on the effective date of these regulations, shall govern the posting and release of such a surety. However, for the purposes of this section, the following changes are necessary:

(A) Several terms used in the federal regulations shall be replaced as follows:

Term in Federal Regulations	*Replacement for this Section*
''hazardous waste''	''solid or special waste''
''RCRA permit''	''DEP permit''
''Regional Administrator''	''Commissioner''
''Environmental Protection Agency or EPA''	''Department of Environmental Protection''
''EPA identification number''	''facility permit number''

(B) The term ''closure plan'' in the federal regulations shall be defined as follows:

''closure plan'' means the facility plan for design, construction, and operation, including closure and post-closure maintenance and gas and water monitoring, required by Section 22a-209-4 (b) (2) of these regulations.

(C) Any reference in the federal regulations to the Resource Conservation and Recovery Act or to a section of the federal regulations other than those incorporated herein by reference shall be deemed a reference to Sections 22a-209-1 through 22a-209-13 of the Regulations of Connecticut State Agencies.

(D) Subsection (g) of 40 CFR Section 264.141 and the definitions of ''post-closure plan'' and ''current post-closure cost estimate'' in the federal regulations shall be omitted.

(E) In 40 CFR Section 264.143 (h), the term ''region'' shall be replaced by ''municipality.''

(2) The owner or operator of an existing privately owned solid or special waste disposal area shall post the closure surety with the Commissioner no later than sixty (60) days after the issuance of the facility's permit to operate, and the owner or operator of a new facility shall post such surety no later than sixty (60) days before he or she begins to accept solid waste.

(j) **As-built plans.** Within ninety (90) days of completion of construction of a solid waste facility other than a solid or special waste disposal area, the permittee shall submit to the Department a complete set of as-built drawings of the facility. Such drawings shall become part of the facility plan.

(Effective March 21, 1990)

Sec. 22a-209-5. Contract approvals

The operator of any solid waste facility which is to receive solid or special wastes through the provisions of a contract submitted to the Commissioner for approval pursuant to Section 22a-213 of the Connecticut General Statutes shall submit the following information to the Commissioner:

(a) Information to be submitted if the facility is a solid or special waste disposal area:

(1) Unless previously submitted, a detailed site map showing the proposed final topography of the site and a topographic survey of all permitted areas which have been filled as of a date no more than six (6) months prior to the date of contract

execution. The maps shall be developed in conformance with the engineering requirements of Sections 22a-209-4 (b) (2) (A) (ii) and (iii) of these regulations.

(2) Daily records of all wastes received at the facility, prepared in accordance with Section 22a-209-7 (f) of these regulations, since the topographic survey was made pursuant to subsection 22a-209-5 (a) (1) of these regulations.

(3) Unless previously submitted, all monthly summaries of wastes received from any source which may continue to use the site during any part of the proposed contract term. If no summaries are available, copies of contracts, lists of sources and estimates of volumes of all wastes expected to be received during the life of the proposed contract shall be submitted.

(4) Any further information deemed by the Commissioner to be necessary to determine whether the proposed contract should be approved.

(b) Information to be submitted if the facility is a transfer station, resources recovery facility or other volume reduction facility or a biomedical waste treatment facility:

(1) daily records of all wastes received at the facility prepared in accordance with Section 22a-209-9 (p) of these regulations if the facility is a transfer station, and in accordance with 22a-209-10 (m) of these regulations if the facility is a resources recovery facility or other volume reduction plant, or biomedical waste treatment facility and

(2) any further information deemed by the Commissioner to be necessary to determine whether the proposed contract should be approved.

(c) The Commissioner may impose any conditions he or she deems necessary upon an approval of a contract.

(d) The Commissioner shall not approve a contract unless the facility is constructed and operated in compliance with applicable statutes and regulations and the facility permits issued by the Department.

(e) Contract approval shall be effective upon issuance. The contract parties shall abide by all the terms and conditions of the approval.

(f) The Commissioner shall not approve any contract which is required by statute, including but not limited to Section 7-237bb, 22a-211 and 22a-260 through 22a-281 of the General Statutes as amended, to be consistent with the State Solid Waste Management Plan, unless it is so consistent. In acting on any other contract, the Commissioner shall consider whether the contract is consistent with such plan.

(Effective March 21, 1990)

Sec. 22a-209-6. Certification of operators

(a) **Certified operator present.** The owner or operator of a solid waste facility shall assure that a certified operator is present at the solid waste facility at all times during operating hours, except as provided by Section 22a-209-6 (c) of these regulations.

(b) **Certification procedures:**

(1) Persons desiring to be certified shall apply to the Commissioner on forms provided by the Commissioner.

(2) Before an applicant is certified, he or she shall demonstrate to the Commissioner sufficient training in solid waste facility operational procedures to be able to oversee the operation of the solid waste facility in accordance with applicable state and federal statutes and regulations. Such training may consist of on-the-job or classroom instruction, or a combination of both, in solid waste management procedures and public health and safety.

(3) The Department of Environmental Protection shall certify applicants through use of one of the following methods:

(A) a written or oral examination designed to test the knowledge of the applicant regarding operational procedures of a solid waste facility relative to public health, safety and environmental matters, or

(B) a review of the qualifications of the applicant through an interview with the applicant and written documentation of his or her experience and/or training and record of compliance with operational requirements for similar solid waste facilities.

(4) Upon satisfactory fulfillment of the requirements of this section, the Commissioner shall issue a certificate attesting to the applicant's competency and his or her knowledge of a specific type of solid waste facility and its operation. Certificates shall be valid for a period of five (5) years from the date of issuance, and all existing valid certificates shall be valid through September 30, 1991. Certificates are revocable for non-compliance with state statutes or regulations when such non-compliance is the result of the certified operator's unreasonable action or inaction. The Commissioner may revoke or suspend such operator's certification in accordance with Section 4-182 of the Connecticut General Statutes and the Rules of Practice of the Department, as amended, and shall send advance notice of such revocation or suspension to the owner or operator of each facility at which the subject certified operator is employed.

(5) The Commissioner may require all certified operators to successfully complete additional instruction, examination, or both in solid waste management and pollution control technology to maintain certification. Such instruction may consist of the on-the-job or classroom instruction, or a combination of both, and such examination may be written or oral, or a combination of both.

(6) To renew a certificate that has expired, the previously certified operator must complete a training course offered by the Department of Environmental Protection for maintenance of proficiency or, as required, pass the examination or qualification review required in subdivision (b) (3) of this section.

(c) **Loss of certified operator.** (1) In the event a solid waste facility has no certified operator or the facility's sole certified operator has his or her certification revoked, it lapses, or the certified operator leaves for any reason, the owner or operator shall immediately (A) notify the Department and (B) apply to have an appropriate person certified in accordance with subsection (b) of this section.

(2) The Department shall administer the appropriate training and examination or review in a timely fashion, and the designated person shall undergo such training and examination or review at the first available opportunity, and pass such examination or review.

(3) Such a solid waste facility may operate without a certified operator provided the owner or operator complies with subsections (c) (1) and (2) of this section.

(Effective September 22, 1988)

Sec. 22a-209-7. Solid waste disposal areas

Solid waste disposal areas shall comply with the following permit and operating requirements.

(a) Any person wishing to operate a solid waste disposal area must comply with the permit requirements of Section 22a-209-4 of these regulations.

(b) The information which the Commissioner requires in an application may vary according to the category of the disposal area. Such categories may include:

(1) existing solid waste disposal areas where future disposal will take place only in areas where solid waste has previously been disposed of and is still present,

(2) existing solid waste disposal areas where future disposal will take place in areas where no solid waste had previously been disposed of, or, if solid waste had previously been disposed of, it has been removed, and

(3) new solid waste disposal areas.

(c) **Protection of ground and surface waters.** (1) Minimum separation from ground waters. A minimum of sixty (60) inches shall be maintained between the base of deposited solid wastes and the maximum high water table or bedrock unless the permittee can establish to the satisfaction of the Commissioner that some lesser separation will be adequate to insure that solid wastes do not contact ground water. This provision shall not apply to solid waste disposal areas subject to solid waste permits granted prior to the effective date of these regulations which expressly authorize a minimum separation from ground water or bedrock of less than sixty (60) inches, provided that the permittee establishes to the satisfaction of the Commissioner that the continuation of solid waste disposal in accordance with such existing permit will not result in contact of solid waste with ground water.

(2) Water quality. (A) In addition to the requirement of 22a-209-7 (c) (1) above, and except as provided in 22a-209-7 (c) (2) (B) below, a new or existing solid waste disposal area shall not impair the quality of surface or ground water beyond the solid waste boundary to a degree that would degrade the quality of such waters beyond the water quality classification established by the Department in accordance with Section 22a-426 of the Connecticut General Statutes, The Connecticut Water Quality Standards and Criteria, as amended, or the standards for quality of public drinking water established by the State Department of Health Services and contained in Section 19-13-B102 of the Regulations of Connecticut State Agencies, as amended. In those cases where the existing water quality fails to meet the established standards, the disposal area shall not further degrade the water quality.

(B) Notwithstanding 22a-209-7 (c) (2) (A) above, the Commissioner may designate an alternate boundary, beyond the solid waste boundary, beyond which the site may not impair the quality of surface or ground waters in accordance with the standards noted in 22a-209-7 (c) (2) (A). The designation of an alternate boundary must not result in the degradation of the quality of water which may be needed or used for human consumption, and must be based on an analysis to include but not be limited to the following factors:

(i) the hydrogeological characteristics of the facility and the surrounding land,

(ii) the volume and physical and chemical characteristics of the leachate,

(iii) the quantity, quality and directions of flow of ground water,

(iv) the proximity and withdrawal rates of ground water users in the vicinity of the solid waste disposal area,

(v) the availability of alternate drinking water supplies,

(vi) the existing quality of ground water including other sources of contamination and their cumulative impacts on ground water,

(vii) public health, safety, and welfare effects, and

(viii) the zone of impact for the leachate plume.

(3) Grading. The solid waste disposal area shall be graded, and provided with drainage facilities if necessary, to minimize infiltration of rainfall or surface runoff onto the area, to prevent erosion or washing out of the area, and to prevent the collection of standing water on the area. The top surface area shall at all times be graded to a slope of at least four (4) percent unless otherwise authorized by the Commissioner, and the side slopes shall not exceed a grade of one (1) on three (3), one vertical on three horizontal, unless otherwise authorized by the Commissioner.

(4) Floodplains. Solid waste facilities in floodplains shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste, so as to pose a hazard to persons or property, wildlife, or land or water resources.

(5) Surface water. Solid waste shall not be deposited so as to come in contact with surface waters, and disposal operations shall be conducted so as to minimize impact on surface waters. The Commissioner shall determine the required separation distance between deposited solid wastes and surface water for each solid waste disposal area based on site conditions.

(6) Erosion control. Siltation or retention basins or other methods approved by the Commissioner for retarding runoff shall be used where necessary to avoid stream siltation or flooding problems due to excess runoff.

(7) Wells. A minimum distance of one thousand (1000) feet shall be maintained between deposited solid wastes and wells used for water supply purposes unless the owner or operator can establish to the satisfaction of the Commissioner that some lesser separation will be adequate to insure against pollution of the waters withdrawn from said wells.

(8) Monitoring. (A) No new solid waste disposal area shall begin operations without the owner or operator first installing a ground water monitoring system constructed and located as specified in the approved facility plan. Further, no new disposal area shall begin operations prior to the owner or operator obtaining a sufficient number of surface and ground water samples, and analyses thereof, to establish baseline water quality information. Monitoring shall be performed in accordance with the schedule in the facility plan and/or permit to construct.

(B) Upon written notice to the owner or operator of an active solid waste disposal area or the owner of an inactive or closed solid waste disposal area that in the opinion of the Commissioner the area poses an actual or potential threat to the quality of the ground or surface waters of the state, the owner or operator shall investigate the extent and degree of surface and/or ground water contamination resulting from the disposal of solid wastes; submit construction and installation plans for a surface and/or ground water monitoring system to the Commissioner for approval; and, upon approval, install such monitoring system in conformance with such approved plans. The approved plans shall become part of the facility plan. Monitoring shall be performed in accordance with a schedule approved by the Commissioner.

(C) Ground or surface water samples shall be analyzed by a state-approved laboratory using methods approved by the Commissioner. Copies of analyses shall be forwarded to the Solid Waste Management Unit of the Department.

(d) **Access.** (1) All-weather roads which provide access between public roads or highways and the solid waste disposal area are required and shall be maintained so as to be passable by all vehicles which utilize the area.

(2) Access to the solid waste disposal area shall be controlled to prevent unauthorized use. Control may be accomplished through use of appropriate fences, gates and signs.

(3) A sign shall be posted at the entrance to the facility which states, at a minimum, the name of the permittee and hours of use of the area, the authorized users, and required safety precautions.

(e) **Fire protection.** (1) The owner or operator of an active solid waste disposal area, and the owner of an inactive or closed disposal area shall be responsible for firefighting activities. The owner or operator of a disposal area wherein smoldering, smoking or burning is occurring shall:

(A) immediately notify the Solid Waste Management Unit of the Department,

(B) if reasonably necessary, obtain firefighting assistance from the fire department(s) having jurisdiction in the area,

(C) insure that firefighting activities continue until all smoldering, smoking and burning has ceased, as proven by scientific methods acceptable to the Department, and

(D) close the facility until all smoldering, smoking and burning has ceased, if required by the Commissioner or local firefighting officials.

(2) The owner or operator of any solid waste disposal area shall not conduct disposal activities within the immediate vicinity of any smoldering, smoking, or burning. Precautions shall be taken to prevent disposal activities from interfering with firefighting activities.

(3) Any disruption of the grade or covered compacted surfaces shall be repaired and recovered upon completion of firefighting activities.

(f) **Measuring procedures.** (1) Daily records for regional solid waste disposal areas shall be maintained in a manner acceptable to the Commissioner. Such records shall state measured weights or estimated tonnage of wastes received from each municipality using the site, total weights from other sources, and the tonnage of materials removed for resource recovery and the markets used. Such records shall be available for inspection by representatives of the Department at any reasonable time. Monthly summaries of these records shall be submitted to the Department no later than ten (10) days after the last day of each quarter of the calendar year.

(2) Updated topographic mapping of fill areas performed in compliance with the specifications in 22a-209-4 (b) (2) (A) (ii) and (iii) shall be submitted to the Commissioner annually, for regional solid waste disposal areas. The Commissioner may require the submittal of such information for other disposal areas as he or she deems necessary.

(g) **Certified operators.** An operator certified by the Commissioner in accordance with Section 22a-209-6 of these regulations shall be present at a solid waste disposal area at all times during operating hours.

(h) **Working face.** (1) The width of the working face shall be kept as narrow as is consistent with the proper operation of trucks and equipment in order that the area of waste material exposed during the operating day is minimal. No working face shall exceed one hundred fifty (150) feet in width when measured across the operating surface of the solid waste disposal area. Except where separate areas are designated on the approved facility plan for specific wastes, no more than one working face shall be in use at any one time.

(2) Unloading of solid wastes shall be restricted and controlled to assure the proper handling of solid wastes. Scavenging at the working face shall be prohibited.

(3) The cell construction method of sanitary landfilling shall be used. Solid waste shall be spread and compacted in layers not to exceed three feet thick in order to conserve capacity of the solid waste disposal area and minimize moisture infiltration, settlement and public health problems. Each individual cell shall not exceed ten (10) feet in height unless the owner or operator of such solid waste disposal area can establish to the satisfaction of the Commissioner that individual cells with a height greater than ten (10) feet may be utilized without interfering with the safe and sanitary operation of the disposal area. Cover material shall be placed on each cell according to Section 22a-209-7 (*l*).

(i) **Waste collection areas.** (1) Owners or operators of solid waste disposal areas may provide one or more containers within a designated collection area so that waste

may be unloaded from non-commercial vehicles and deposited therein. Disposal area personnel shall oversee the disposal of waste at such designated collection areas.

(2) Scavenging at waste collection areas shall be prohibited.

(3) Collection areas shall be located a safe distance from the working face and from the movement of disposal area equipment and commercial collection and hauling vehicles.

(4) The owner or operator shall be responsible for the sanitary condition and orderly appearance of the waste collection area, and shall remove all waste from the collection area and deposit it in the working face of the disposal area at such frequencies as to insure that no waste remains in the collection area for longer than forty-eight (48) hours.

(5) Portions of the solid waste disposal area which are used solely to collect and store recyclable materials are not subject to the requirements of subdivision (i) (4) of this section.

(j) **Equipment.** (1) The equipment used for spreading, compacting and covering shall be of sufficient size and number to achieve maximum compaction and efficient operation.

(2) Provision shall be made for the routine operational maintenance of equipment at the solid waste disposal area or elsewhere, and for the prompt repair or replacement of equipment.

(3) The owner or operator of a solid waste disposal area shall establish a contingency plan outlining procedures for obtaining alternative equipment or other alternative method of disposal in the event of an equipment breakdown which can reasonably be expected to exceed twenty-four hours in duration. The owner or operator shall notify the Department immediately when such a breakdown occurs.

(k) **Blowing litter.** Blowing litter shall be controlled by use of fencing near the working area or by the use of earth banks or other natural barriers acceptable to the Commissioner. Solid wastes shall be unloaded in such a manner as to minimize scattering. The entire solid waste disposal area shall be reasonably clear of litter at the end of each working day.

(*l*) **Cover operations.** (1) Cover material. There shall be stored within the boundaries of the solid waste disposal area a standby supply of cover material equal to twenty-five (25) percent of the volume of the disposal area consumed in ten days at normal disposal rates. Such cover stockpile shall be protected from freezing in the winter season.

(2) Daily cover. Cover material shall be applied and compacted to a minimum thickness of six (6) inches on all exposed wastes by the end of each working day.

(3) Intermediate cover. On all but the final lift of a solid waste disposal area, if more than nine months is expected to elapse before another lift is added, a layer of intermediate cover material, compacted to a minimum uniform depth of one (1) foot, shall be placed on such area and vegetative cover shall be planted in the next planting season and shall be maintained thereon.

(4) Final cover. A uniform layer of final cover material compacted to a minimum depth of two (2) feet shall be placed over the entire surface of each portion of the final lift not later than one week following the final placement of solid waste in that portion of the area unless otherwise specified in the facility permit to construct. Upon application of final cover, the area shall be regraded to prevent erosion and ponding, and vegetative cover shall be planted in the next planting season and shall be maintained thereon.

(m) **Vector control.** (1) Conditions shall be maintained that are unfavorable for the harboring, feeding and breeding of vectors.

(2) Additional means for controlling and exterminating vectors shall be instituted, whenever necessary in the judgment of the Commissioner to prevent the transmission of disease.

(n) **Decomposition gases.** (1) Decomposition gases generated within the solid waste disposal area shall be controlled as necessary to avoid posing a hazard to any persons or property and to minimize adverse environmental effects.

(2) The concentration of methane gases generated by the solid waste disposal area shall not exceed: (A) Twenty-five percent (25%) of the lower explosive limit for methane in on-site or off-site structures including buildings, sheds and utility or drainage lines, but excluding gas control or recovery system components, or

(B) The lower explosive limit for methane in the ground at the property boundary of the solid waste disposal area.

(3) (A) No new solid waste disposal area shall begin operations without the owner or operator first installing any gas venting and monitoring system indicated on the approved facility plan. A phase-in of the system may be permitted if so indicated in the facility's permit to construct.

(B) Upon written notice to the owner or operator of an active solid waste disposal area or the owner of an inactive or closed solid waste disposal area that in the opinion of the Commissioner the area poses an actual or potential hazard from decomposition gases, the owner or operator shall submit construction and installation plans for a gas monitoring and/or venting system to the Commissioner for approval, and, upon approval, shall install such a system in conformance with such approved plans. The approved plans shall become part of the facility plan. Monitoring shall be performed in accordance with a schedule approved by the Commissioner.

(4) The recovery of methane gases for use as a fuel is not prohibited by this subsection.

(o) **Restrictions on certain wastes.** (1) Hazardous wastes shall be excluded from solid waste disposal areas. However, separate facilities at a solid waste disposal area may be approved for the disposal of certain hazardous wastes by the Commissioner in accordance with Public Act 84-115 and the Hazardous Waste Management regulations of the Department of Environmental Protection. Special wastes, including any liquid waste, shall be excluded unless disposal is approved in writing by the Commissioner.

(p) **Recycling.** Materials to be recycled shall be maintained in a separate area so as not to interfere with disposal operations. Materials held for recycling shall be adequately screened from view or removed at frequent intervals.

(q) **Employee facilities.** Each solid waste disposal area shall have adequate shelter and restroom facilities for employees, first aid supplies, and telephone or two-way (i.e., sending and receiving) radio communication equipment. Each of these must be provided at or adjacent to the disposal area.

(r) **Air quality.** (1) Dust and odors resulting from the operation of the solid waste disposal area shall be controlled at all times to assure compliance with the applicable regulations of the Department for the Abatement of Air Pollution.

(2) No open burning of solid waste shall be conducted except upon compliance with the applicable statutes and regulations of the Department for the Abatement of Air Pollution regarding open burning.

(s) **Bird hazards to aircraft.** A solid waste disposal area disposing of putrescible wastes that may attract birds and which occurs within 10,000 feet (3,048 meters)

of any public airport runway used by turbojet aircraft or within 5,000 feet (1,524 meters) of any public airport runway used by only piston-type aircraft shall conduct its operations so as not to pose a bird hazard to aircraft. Affirmative measures for bird hazard control shall be taken as necessary.

(t) **Screening.** Best practical effort shall be made to screen the working face of a solid waste disposal area from view from surrounding residential or business areas.

(u) **Disruption of solid waste disposal areas.** (1) Written approval shall be obtained from the Commissioner prior to any excavation, disruption, or removal of deposited material at an active, inactive or closed solid waste disposal area.

(2) All requests for approval shall include but need not be limited to an operational plan stating the area involved, depth of proposed excavation with final grades, estimated cubic yards of material to be excavated or disrupted, site where excavated material is to be redeposited and estimated time required for completion of excavation procedures. The approved plan shall become part of the facility plan.

(3) All excavation shall be confined to an area consistent with the number of pieces of digging equipment and/or trucks used for haulage.

(4) Adequate measures shall be taken during excavation to protect the public health and to control dust, odors, fires, vectors, and blowing litter.

(5) Disposal of all solid waste resulting from excavation shall be in conformity with the requirements of these regulations.

(v) **Endangered species.** (1) Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife. As used in this subsection, ''endangered or threatened species'' means any species listed as such pursuant to Section 4 of the Endangered Species Act.

(2) The facility or practice shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 CFR Part 17. As used in this subsection, ''destruction or adverse modification'' means a direct or indirect alteration of critical habitat which appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat, and ''Taking'' means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting or attempting to engage in such conduct.

(w) **Fill limit markers.** The permitted lateral fill limits of a new solid or special waste disposal area or unused portions of an active solid or special waste disposal area shall be staked with markers approved by the Commissioner which shall be located such that the neighboring markers may be easily seen from each marker. Solid waste shall not be deposited beyond the line between neighboring markers.

(x) (1) New municipal solid waste disposal areas. After the effective date of this subsection, no permit shall be issued under Section 22a-208a of the General Statutes for construction and operation of a new municipal solid waste disposal area unless:

(A) The groundwater at such solid waste disposal area and its zone of influence is classified GC by the Water Quality Standards.

(B) An application under Section 22a-208a of the General Statutes has been filed with the Commissioner to construct and operate such solid waste disposal area and such application includes the information and materials specified in subsection (f) of Section 22a-209-14 of the Regulations of Connecticut State Agencies; and

(C) Such solid waste disposal area will be constructed and operated in compliance with the requirements of subsections (g), (h), (i), (j), and (k) of Section 22a-209-14 of the Regulations of Connecticut State Agencies.

(2) An application to construct and operate a new municipal solid waste disposal area may propose alternate technologies to meet the goals of subsections (g) (1) through (g) (4), (h), (i), (j), and, (k) of Section 22a-209-14 of the Regulations of Connecticut State Agencies, which goals are to protect the waters of the State from pollution and to prevent the dispersion of waste. The applicant shall demonstrate that such alternate technologies will achieve these goals to the same degree as the requirements of the said subsections, that such alternate technologies have been utilized in similar circumstances, and that such alternate technologies are supported by scientific and engineering evidence that they will provide an equivalent degree of protection against water pollution and dispersion of waste as implementation of the requirements specified in the said subsections.

(Effective February 28, 1990)

Sec. 22a-209-8. Special waste disposal

Special waste disposal shall comply with the permit and operation and management requirements of solid waste disposal areas with the exceptions and additional special considerations noted in this section.

(a) Any person wishing to operate a solid waste facility specifically for special wastes must comply with the permit requirements of Section 22a-209-4 of these regulations.

(b) A separate permit to construct or to operate is not required if combined disposal of the waste in question with other solid wastes or special wastes is authorized and the requirements for these special wastes are adequately provided for in the facility plan.

(c) The combined disposal of special wastes with other solid wastes or special wastes is prohibited unless specifically approved in writing by the Commissioner. The use of casting sands, contaminated dredge spoils or fly-ash as cover material may be allowed upon written approval of the Commissioner. Any such approval shall become part of the facility plan.

(d) Certification procedures for operators of facilities handling special wastes shall include a requirement for specific training or experience in the unique characteristics and handling requirements of the special wastes to be disposed of under the operator's supervision.

(e) This section does not prohibit the diversion of special wastes to composting operations or for resource recovery.

(f) Special handling requirements for special wastes shall, as the Commissioner deems necessary, include but not be limited to the following:

(1) For each specific waste, the disposal facility owner or operator shall submit for the Commissioner's review and approval a report on the physical and chemical analysis and leachate analysis of a representative number of samples of the waste materials, such analyses to be conducted by methods approved or prescribed by the Commissioner,

(2) Pretreatment or dewatering of sludges or other waste materials with high moisture content,

(3) Erosion and siltation control measures for the disposal of easily eroded materials,

(4) Dust control measures including prompt application of cover material, use of water or calcium chloride, all-weather road surfaces, washing of vehicles, and use of dust-filtering masks for the disposal of easily airborne waste materials,

(5) Odor control including limited working areas and prompt cover and use of masking agents with specific written approval of the Commissioner, and

(6) Equipment maintenance procedures including frequent inspection and prompt replacement of air filters and other repairs as may be needed when handling fine or abrasive waste materials.

(7) The requirements under Section 22a-209-7 of these regulations for daily cover and ground water separation distances for the disposal of these wastes may be reduced with the written approval of the Commissioner if it is established to the satisfaction of the Commissioner that such reduction will not result in the pollution of the waters of the State in violation of Section 22a-209-7 (c) (2) of these regulations.

(g) Special handling requirements for the storage, disposal or processing of scrap tires shall include but not be limited to the following:

(1) Operations of solid waste facilities involving the storage of scrap tires shall be provided with fire prevention and control measures which the Commissioner deems adequate including the provision of security fencing, 50 foot wide fire lanes, heavy duty fire extinguishers, and hydrants or fire ponds. Arrangements shall also be made with local fire departments for their services as needed.

(2) The owner or operator of a scrap tire storage or processing facility shall submit, for the Commissioner's approval, a facility plan for on-site or a description of off-site disposal of all tires which the facility could hold at maximum capacity. The owner or operator of a privately owned tire storage or processing facility shall post sufficient surety with the Commissioner to cover the cost of disposal in accordance with such plan or description. The provisions of the federal regulations listed in Section 22a-209-4 (h) of these regulations, with the changes noted in that Section, shall govern the posting of such surety. The owner or operator of an existing facility shall post such surety no later than sixty (60) days after the issuance of the facility permit to operate, and the owner or operator of a new facility shall post such surety no later than sixty (60) days before he or she begins to accept tires for storage or processing.

(3) Scrap tire processing facilities shall be considered resource recovery facilities and their design, permitting and operation shall conform to the requirements of Section 22a-209-10 of these regulations. Any storage of tires at such a facility shall comply with the requirements of this subsection.

(4) For the disposal of tires, the requirements for daily cover under subsection 22a-209-7 (*l*) of these regulations may be reduced at most to a requirement for weekly cover and that for surface or ground water separation distances may be waived or the ground water separation reduced.

(h) Special handling requirements for the disposal of bulky wastes shall include but not be limited to the following:

(1) Disposal at bulky waste disposal areas shall be limited to landclearing debris and wastes resulting directly from demolition activities. This limitation shall not apply to bulky waste disposal areas operated under permits issued prior to the effective date of these regulations which expressly authorize the disposal of other wastes provided that the permittee establishes to the satisfaction of the Commissioner that the continuation of such disposal in accordance with such existing permit will not result in pollution of the waters of the state in violation of Section 22a-209-7 (c) (2) of these regulations.

(2) The requirements under subsection 22a-209-7 (*l*) of these regulations for daily cover may be reduced at most to a requirement for weekly cover and the ground water separation distance may be reduced at most to a minimum of two feet above the maximum high water table if it can be shown to the satisfaction of the Commissioner that such reduction will not result in pollution of the waters of the state in violation of Section 22a-209-7 (c) (2) of these regulations.

(i) Special handling requirements for the disposal of asbestos waste shall include but not be limited to the following:

(1) No asbestos shall be disposed of until the Commissioner issues specific written authorization and it is received by the operator of the disposal area, the generator, and the authorized hauler of the asbestos waste. The authorization shall specify the source, quantity and type of asbestos waste to be disposed of and any other information deemed necessary by the Commissioner.

(2) Before accepting any asbestos waste the disposal area operator must make sure that the following requirements are satisfied. (A) The asbestos must be packaged in impermeable dust-tight containers such as heavy duty 6 mil plastic bags or sealed fiber pack drums.

(B) All containers must be labeled in large legible letters as follows:

CONTAINS ASBESTOS — AVOID OPENING OR BREAKING CONTAINER — BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH.

(C) The asbestos must be transported separately from other waste materials.

(3) The asbestos must be deposited at the base of the working face of the disposal area without breaking or otherwise opening the containers, and shall be immediately covered with nine inches of cover material or, if approved by the Commissioner, dry non-asbestos waste material.

(Effective March 21, 1990)

Sec. 22a-209-9. Solid waste transfer stations

Solid waste transfer stations shall comply with the following permit and operating requirements.

(a) Any person wishing to operate a solid waste transfer station must comply with the permit requirements of Section 22a-209-4 of these regulations.

(b) In addition to the application requirements specified in Section 22a-209-4 (b), an application for a transfer station permit to construct shall include a copy of any haul-away contract made by a city, town, borough or regional authority for collection, transportation, processing, storage and disposal outside its boundaries of solid wastes generated within its boundaries in accordance with Section 22a-213 of the Connecticut General Statutes.

(c) **Access.** (1) A sign shall be posted at the entrance to the facility which states, at a minimum, the name of the permittee and hours of use of the operation, the authorized users, and required safety precautions.

(2) Access to the facility shall be controlled to prevent unauthorized use. Control may be accomplished through use of appropriate fences, gates and signs.

(d) **Enclosure.** A building roofed and enclosed on all sides, or otherwise enclosed to satisfactorily control dust and litter shall be provided.

(e) **Screening.** Screening from view shall be provided for a transfer station located within 500 feet of a residence.

(f) **Certified operator.** An operator certified by the Commissioner in accordance with Section 22a-209-6 of these regulations shall be present at a solid waste transfer station at all times during working hours.

(g) **Storage.** (1) No solid waste shall be stored within the property boundary for a period greater than forty-eight (48) hours with the exception of legal holiday weekends, unless authorized by the Commissioner.

(2) A minimum of twenty-four (24) hours storage capacity shall be provided for solid wastes in transfer stations which have a design capacity of more than one hundred (100) tons of solid wastes per eight (8) hour day.

(h) **Working area.** Unloading of solid waste shall take place only within the enclosed structure and/or in designated areas approved in writing by the Commissioner. Scavenging shall be prohibited at the unloading area.

(i) **Litter control.** Solid waste shall be confined to the unloading, loading and handling area. The transfer station and adjacent areas shall be kept clean and reasonably free of litter.

(j) **Restrictions on certain wastes.** Hazardous wastes and special wastes shall be excluded unless plans for special handling have been submitted to the Commissioner and approved in writing.

(k) **Air quality.** (1) Dust and odors resulting from the unloading of solid waste and the operation of the transfer station shall be controlled at all times to assure compliance with the applicable regulations of the Department for the Abatement of Air Pollution.

(2) No open burning of solid waste shall be conducted except upon compliance with regulations of the Department for the Abatement of Air Pollution regarding open burning.

(*l*) **Fire control.** (1) Solid waste which is burning or is at a temperature likely to cause fire or is of a highly flammable or explosive nature shall not be accepted in the transfer station.

(2) Adequate equipment shall be provided to control fires, and arrangements made with the local fire protection agency to immediately acquire services when needed. The Solid Waste Management Unit of the Department shall be immediately notified when a fire occurs.

(m) **Vector control.** (1) Conditions shall be maintained that are unfavorable for the harboring, feeding and breeding of vectors.

(2) Additional means for controlling and exterminating vectors shall be instituted, whenever necessary in the judgment of the Commissioner to prevent the transmission of disease.

(n) **Maintenance.** Provision shall be made for the routine operational maintenance of the transfer station and appurtenances.

(o) **Shutdown.** If for any reason the transfer station is rendered inoperable, an alternative method approved by the Commissioner shall be available for solid waste disposal. The Department shall be notified within twenty-four (24) hours when such an occasion arises.

(p) **Measuring procedures.** Daily records for transfer stations shall be maintained in a manner acceptable to the Commissioner. Such records shall state measured weights or estimated tonnage of wastes received from each community using the transfer station, total weights from other sources, specific sites to which it was delivered for disposal, and the tonnage of materials removed for resource recovery and markets used. Such records shall be available for inspection by representatives of the Department at any reasonable time. Monthly summaries of these records shall be submitted to the Department no later than ten (10) days after the last day of each quarter of the calendar year.

(q) **Temporary facilities.** The Commissioner shall prescribe guidelines for the design and operation of transfer stations which will operate for a period of less than two (2) years. Such a facility must secure a variance as provided in Section 22a-209-11 of these regulations.

(Effective February 21, 1985)

Sec. 22a-209-10. Resource recovery facilities and other volume reduction plants

Resources recovery facilities, other volume reduction plants, and biomedical waste treatment facilites shall comply with the following permit and operating requirements.

(1) Any person wishing to operate a resources recovery facility or other volume reduction plant or biomedical waste treatment facility must comply with the permit requirements of Section 22a-209-4 of these regulations.

(2) In addition to the application requirements specified in Section 22a-209-4 (b), an application for a permit to construct for a resources recovery facility or other volume reduction plant or a biomedical waste treatment facility shall include specifications for all process equipment and a material and energy balance if appropriate.

(3) **Access.** (A) A sign shall be posted at the entrance to the operation which states, at a minimum, the name of the permittee and hours of use of the facility, the authorized users, and required safety precautions.

(B) Access to the facility shall be controlled to prevent unauthorized use. Control may be accomplished through use of appropriate fences, gates and signs.

(4) **Storage.** No solid waste shall be stored within the property boundary for a period greater than forty-eight (48) hours with the exception of legal holiday weekends, unless authorized by the Commissioner.

(5) **Working area.** Unloading of solid waste shall take place only within an enclosed structure and/or only in designated areas approved in writing by the Commissioner. Scavenging shall be prohibited at the unloading area.

(6) **Litter control.** Solid waste shall be confined to the unloading, loading, and handling area. The facility and adjacent areas shall be kept clean and reasonably free of litter.

(7) **Certified operators.** An operator certified by the Commissioner in accordance with Section 22a-209-6 of these regulations shall be present at the resources recovery facility or other volume reduction plant or biomedical waste treatment facility at all times during working hours.

(8) **Restrictions on certain wastes.** Hazardous wastes and special wastes shall be excluded unless the facility is designed to handle such materials and plans for the special handling have been submitted to the Commissioner and approved in writing.

(9) **Air quality.** Air emissions, dust and odors resulting from the unloading of solid waste and the operation of the resources recovery facility or other volume reduction plant or biomedical waste treatment facility shall be controlled at all times to assure compliance with the applicable regulations of the Department for the Abatement of Air Pollution.

(10) **Fire control.** Equipment shall be provided to control fires and arrangements made with the local fire protection agency to immediately acquire services when needed. The Bureau of Waste Management of the Department shall be immediately notified when a fire occurs.

(11) **Explosion.** The resources recovery facility or other volume reduction plant or biomedical waste treatment facility design and/or equipment shall provide for explosion protection. The Bureau of Waste Management of the Department shall be immediately notified when an explosion occurs.

(12) **Shutdown.** If for any reason the resources recovery facility or other volume reduction plant or biomedical waste treatment facility is rendered inoperable, an

alternative method approved by the Commissioner shall be available for the processing or transfer and disposal of solid waste, and the Department shall be notified within twenty-four (24) hours when such an occasion arises.

(13) **Measuring procedures.** Daily records for resources recovery facilities and other volume reduction plants and biomedical waste treatment facilities shall be maintained in a manner acceptable to the Commissioner. Such records shall state measured weights or estimated tonnage of wastes received from each municipality or generator of biomedical waste using the facility, total weights from other sources, tonnage processed, materials removed for resources recovery and markets used, tonnage of residue delivered for disposal and specific sites used. Monthly summaries of these records shall be submitted to the Department no later than ten (10) days after the last day of each quarter of the calendar year.

(14) **Temporary facilities.** The Commissioner shall prescribe guidelines for the design and operation of resource recovery facilities or other volume reduction plants which will operate for a period of less than two (2) years. Such a facility must secure a variance as provided in Section 22a-209-11 of these regulations.

(Effective March 21, 1990)

Sec. 22a-209-11. Variances

(a) An owner or operator of a solid waste facility may apply to the Commissioner for a variance from one or more of the provisions of these regulations. Specifically, a variance may be sought for (1) design of facility, (2) operating requirements, and (3) temporary operations. For any variance which is not a minor permit amendment pursuant to Section 22a-209-4 (f) of these regulations, the Commissioner shall publish notice of the request for variance and accept public comments thereon, oral, or written, in the same manner as specified in Section 22a-209-4 (b) (3) for permit applications.

(b) Requests for variance shall be in writing and shall supply such information as the Commissioner reasonably requires, including but not limited to: (1) the nature and location of the solid waste facility,

(2) the reasons for which the variance is requested, including the economic, technological and environmental justification for a variance,

(3) a description of interim control measures to be taken by the facility in lieu of compliance and any possible danger to the environment or to persons or property resulting therefrom,

(4) if the Commissioner deems it necessary, a specific schedule of measures to be taken to bring the facility into eventual compliance with the regulation from which the variance is sought,

(5) the period for which the variance is sought, and the justification for such time period, and

(6) other information deemed reasonably necessary by the Commissioner.

(c) No variance shall be granted unless the applicant establishes to the Commissioner's satisfaction that: (1) Conditions occurring during the period of variance will protect property, the public health and safety, and the natural resources and environment of the State, and

(2) Compliance with the regulation would produce undue hardship without equal or greater benefit to the public.

(d) In making a determination regarding a variance, the Commissioner shall consider: (1) the character and degree of injury to or interference with the reasonable use of property, the public health and safety, and the natural resources and environment of the State which is caused or threatened to be caused,

(2) the social and economic value of the activity for which the variance is sought,

(3) the suitability or unsuitability of the activity to the area in which it is located, and

(4) the impracticability, both scientific and economic, of complying with the regulation from which the variance is sought.

(e) A variance shall not be granted solely or principally on the grounds of economic hardship.

(f) The Commissioner shall specify in writing the period for which the variance will be valid.

(g) Unless and until a variance is granted, the owner or operator of a solid waste facility must comply with applicable statutes, regulations, and permit conditions.

(h) The Commissioner may revoke or suspend a variance in accordance with Section 4-182 of the Connecticut General Statutes and the Rules of Practice of the Department, as amended.

(Effective February 21, 1985)

Sec. 22a-209-12. Violations

(a) No person shall violate or cause the violation of any applicable statutes or regulations.

(b) **Remedies for violations.** (1) The Commissioner shall designate employees of the Department who shall, acting with or without complaints, conduct investigations and ascertain whether the solid waste management statutes and regulations are being complied with.

(2) Whenever these employees determine that any applicable statute or regulation has not been complied with, the Commissioner shall send to the person or persons responsible for the noncompliance a written order specifying the nature of the noncompliance and affording a reasonable period of time for its correction. Nothing herein shall be construed to limit the rights of the Commissioner to proceed with any other remedies that he or she may deem necessary.

(3) Unless the person or persons on whom an order has been served requests a hearing within thirty (30) days of the date of issuance in accordance with section 22a-6c of the General Statutes as amended, such order shall become final and effective. If a hearing is requested, it shall be held in accordance with the Uniform Administrative Procedure Act, Chapter 54 of the General Statutes, and the Department's Rules of Practice.

(Effective February 21, 1985)

Sec. 22a-209-13. Closing of solid waste facilities

(a) If an owner or permittee intends to close any solid waste facility without an order from the Commissioner to do so, he or she must notify the Commissioner of his or her intention to do so at least sixty (60) days prior to closing.

(b) The Commissioner may require any action or the submission of any information which he deems necessary to insure the proper closing of any facility so as to preserve and protect the natural resources and environment of the State of Connecticut.

(c) The Commissioner shall inspect or cause to be inspected all solid waste facilities that have been closed to determine if the closing is satisfactory. He or she shall notify the owner of a closed solid waste facility if the closing is satisfactory and shall order necessary construction or other steps to be taken to bring unsatisfactory sites into compliance with applicable regulations.

(d) Detailed information concerning the use of the site following closing shall be submitted to the Commissioner for approval and such approval shall be obtained before any use is made of the site. Upon approval, such plan shall become part of the facility plan.

(e) The regulations governing the closing of solid or special waste disposal areas voluntarily or under order of the Commissioner are 22a-209-7 (c) (3) concerning grading, 22a-209-7 (e) concerning fire protection, 22a-209-7 (*l*) (4) concerning final cover and seeding, 22a-209-7 (m) concerning vector control, 22a-209-7 (n) concerning decomposition gases, and 22a-209-7 (u) concerning disruption.

(f) Within ninety (90) days of the closing of a solid waste or special waste disposal area, the owner or operator shall furnish the Department with a complete set of as-built drawings of the area. Such drawings shall become part of the facility plan.

(g) Upon closing a solid or special waste disposal area, the owner or operator shall record a detailed description of the disposal area in the appropriate municipal land records, and shall send the following to the Commissioner: A copy of such description, certified by the municipal clerk as a true copy, along with a notation of the volume and page reference to the deed to the property on which the disposal area is located, a description of the general types and locations of wastes on the site, the depth of fill, the depth and type of cover material, the dates the disposal area was in use, area of potential impacted ground water as defined in the facility plan submitted with the application for permit to construct, and other information which the Commissioner deems necessary.

(h) Responsibility for post-closure maintenance and monitoring of solid waste or special waste disposal areas shall rest with the property owner of record unless the assignment of those responsibilities to other persons is approved in writing by the Commissioner.

(Effective February 21, 1985)

Sec. 22a-209-14. Disposal of residue

(a) After the effective date of this section, no person shall dispose of residue except at a solid waste disposal area:

(1) With respect to which the Commissioner has issued a permit to discharge leachate under Section 22a-430 of the General Statutes and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies, or with respect to which the operator is in compliance with an order issued under Chapter 446k of the General Statutes;

(2) (A) With respect to which the Commissioner has, after the effective date of this section, issued a permit to construct and operate a solid waste disposal area for the disposal of residue under Section 22a-208a of the General Statutes and Section 22a-209-4 and this section of the Regulations of Connecticut State Agencies, or

(B) If such solid waste disposal area was operating on the effective date of this section, with respect to such solid waste disposal area the Commissioner had issued a permit to operate under Section 22a-208a of the General Statutes and Section 22a-209-4 of the Regulations of Connecticut State Agencies and such permit specifically authorized the disposal of residue at such solid waste disposal area; and

(3) The groundwater at which, and at the zone of influence of which, is classified GC by the Water Quality Standards.

(b) (1) Any person who constructs or operates a solid waste disposal area for the disposal of residue shall comply with all applicable provisions of Chapter 446d of the General Statutes and Sections 22a-209-1 through 22a-209-13, inclusive of

the Regulations of Connecticut State Agencies, including the operator certification requirements of Section 22a-209-6 of the Regulations of Connecticut State Agencies.

(2) Any person who operates a solid waste disposal area for the disposal of residue shall comply with the requirements of this section, except as provided in subdivisions (3) and (4) of this subsection.

(3) Any person who on the effective date of this section operates a solid waste disposal area for the disposal of residue, which solid waste disposal area satisfies the conditions of subdivisions (a) (1), (a) (2) (B), and (a) (3) of this section, but whose operations at which solid waste disposal area do not conform to the requirements of subsection (d) of this section, shall within 90 days of the effective date of this section submit to the Commissioner an application to amend the permit issued to such person under Section 22a-208a of the General Statutes and Section 22a-209-4 of the Regulations of Connecticut State Agencies. The application shall demonstrate that operations at the solid waste disposal area will comply with subsection (d) of this section by a reasonable date or dates.

(4) Any person who on the effective date of this section operates a solid waste disposal area for the disposal of residue, which solid waste disposal area satisfies the conditions of subsection (a) (1), (a) (2) (B) and (a) (3) of this section, may continue to dispose of residue at such solid waste disposal area for only three years without complying with subsections (g) and (h) of this section.

(5) The Commissioner may, upon written application and after a hearing held in accordance with Chapter 54 of the General Statutes and Section 22a-3a-1 of the Regulations of Connecticut State Agencies, extend for up to two years the three-year exemption period provided for in subdivision (4) of this subsection if such an extension would not adversely affect the waters or other natural resources of the state. In determining whether to grant, conditionally grant, or deny an application under this subsection, the Commissioner shall consider the hydrogeology of the affected area, the potential for pollution resulting from further delay in compliance with subsections (g) and (h) of this section, and the time necessary to comply with such subsections.

(6) An application submitted after the effective date of this section to construct and operate a solid waste disposal area for the disposal of residue may propose alternate technologies to meet the goals of this section, which are to protect the waters of the State from pollution and to prevent the dispersion of residue. The applicant shall demonstrate that such alternate technologies will achieve these goals to the same degree as the requirements specified in this section, that such alternate technologies have been utilized in similar circumstances, and that such alternate technologies are supported by scientific and engineering evidence that they will provide an equivalent degree of protection against water pollution and dispersion of residue as implementation of the requirements specified in this section.

(c) Any person who after the effective date of this section seeks a permit to construct and operate a solid waste disposal area for the disposal of residue, or who on the effective date of this section operates a solid waste disposal area for the disposal of residue and such solid waste disposal area and its zone of influence are in a location where the groundwater is not classified GC by the Water Quality Standards, may apply to the Commissioner pursuant to Section 22a-430-4 of the Regulations of Connecticut State Agencies for an amendment of the pertinent groundwater classification.

(d) Any person who operates a solid waste disposal area for the disposal of residue shall comply with the following requirements:

(1) Residue shall be disposed of in monocells. The number of monocells at a solid waste disposal area shall be adequate for the size and configuration of the solid waste disposal area. Enough monocells shall be equipped with pan lysimeters or similar devices to allow a reliable determination of the quantity and quality of leachate generated by residue disposed of at such solid waste disposal area.

(2) No solid waste other than residue shall be deposited in or above the actual limit of a monocell in which residue has been deposited unless the Commissioner determines that such other solid waste will provide equivalent, minimal infiltration, prevent dispersion of any solid waste, including residue, and will not produce leachate that will have an adverse effect on water quality or that will increase the production of leachate from residue or have an adverse impact on the quality of leachate produced by residue.

(3) The groundwater monitoring requirements of Section 22a-430-4 (C) (20) (e) of the Regulations of Connecticut State Agencies shall be met at any solid waste disposal area utilized for the disposal of residue, including provisions for the monitoring of dioxin in groundwater, utilizing a dedicated dioxin sampling well.

(e) An application after the effective date of this section for a permit to construct and operate a solid waste disposal area for the disposal of residue shall comply with the provisions of Section 22a-209-4 of the Regulations of Connecticut State Agencies and shall also include the following:

(1) A completed application under subsection (c) of this section to reclassify groundwater, if applicable.

(2) A completed application for a leachate discharge permit under Section 22a-430 of the General Statutes and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies.

(3) Engineering plans which include:

(A) A plan showing the existing contours of the proposed solid waste disposal area and adjacent land extending to the nearest surface water or to any other surface water which may be affected by operations at such solid waste disposal area or by leachate generated by such solid waste disposal area;

(B) A plan for construction and operation, including the sequence of construction of the solid waste disposal area; lift orientation; location, dimensions, and construction of access roads; and the sequence and construction of cells. Such plan shall include provisions for the inspection of residue as it is deposited at the working face. Such plan shall ensure that the size of the working face of the solid waste disposal area shall be kept to a minimum and that generation of leachate will be minimized through compaction of waste and provision of adequate cover; and

(C) A plan for compliance with subsections (g), (h), (i), and, (j) of this section.

(4) A management plan indicating the personnel and equipment that will be employed to ensure compliance with any approved plan of operation.

(5) A plan for the monitoring of leachate and groundwater that conforms to the provisions of Section 22a-430-4 (c) (20) (E) of the Regulations of Connecticut State Agencies.

(6) A plan for post-closure maintenance and monitoring to ensure the minimization of leachate generation and the monitoring of groundwater and pertinent surface waters for a period of time which is adequate to protect the environment and is at least 30 years. At a minimum such plan shall:

(A) Identify all persons that will be legally responsible for the solid waste disposal area following closure;

(B) Provide for financial guarantees to ensure the long term monitoring and maintenance of the facility as provided for in Section 22a-209-4 (i) of this regulation;

(C) Provide for post-closure inspection, monitoring, and maintenance of the solid waste disposal area and the remediation of any damage to or deficiencies in its liner system, final cover, security facilities, or monitoring or treatment systems or facilities;

(D) Provide for post-closure operation of such treatment system as is provided for leachate.

(7) Two years prior to the conclusion of the post-closure monitoring and maintenance period required by a permit to operate a solid waste disposal facility for the disposal of residue, the Commissioner shall commence reviewing the post-closure monitoring data that has been collected by the owner or operator of such area, and on the basis of that data and any other pertinent information shall determine whether such disposal area is causing or has the potential to cause pollution of the waters of the state or presents a threat to public health. If she determines that such disposal area is causing or has the potential to cause pollution of the waters of the state or presents a threat to public health, she may require that the owner or operator of such disposal area continue for a specified time and in a specified manner to inspect, monitor and maintain such disposal area. Prior to finally making such a determination the Commissioner shall hold a public hearing. The owner or operator of such area shall publish, at least thirty days prior to the hearing, a notice thereof in a newspaper having substantial circulation in the area affected. Such notice shall include the name and location of the solid waste disposal area, the Commissioner's tentative determination, and the time and place of the hearing. Nothing in this subdivision shall affect the Commissioner's authority under the Connecticut General Statutes, Section 22a-6, Chapter 446c, Chapter 446d, Chapter 446k, or Chapter 445.

(f) Residue shall be managed and transported in accordance with the following:

(1) The operator of a resource recovery facility, municipal solid waste incinerator or biomedical waste incinerator shall dewater residue before shipping it to a solid waste disposal area in accordance with such plan for residue dewatering as may have been approved by the Commissioner in the course of the proceeding on the application to construct and operate such facility. Regardless of the dewatering process used, residue shall be dewatered to the maximum extent achievable by use of gravity dewatering and, in any case, to the extent necessary to prevent such residue from becoming airborne. Effluent from the process of dewatering residue shall be discharged in accordance with a permit issued pursuant to section 22a-430 of the General Statutes.

(2) The operator of a solid waste disposal area for the disposal of residue shall be responsible for assuring that residue is transported to such disposal area by equipment and procedures approved by the Commissioner in the course of the proceeding on the application to approve such solid waste disposal area. Such equipment shall be designed to prevent leakage, spillage, and dispersion of residue during transportation.

(3) For each load of residue received at a solid waste disposal area, the operator of such solid waste disposal area shall record the weight of the load, its origin, and the location of the cell utilized for its disposal. Such records shall be maintained at the solid waste disposal area. On January 1, April 1, July 1, and October 1, the operator shall submit to the Commissioner, on a form provided by her, a summary of the information in all such records generated during the preceding three months.

(g) Except as provided in subsections (a) and (b) of this section, a solid waste disposal area for the disposal of residue shall be provided with a liner system which

includes a leachate collection system and a leak detection zone, and a leachate treatment and discharge system. The liner system shall be constructed and operated in accordance with the following requirements. To the extent possible, these requirements shall be implemented to facilitate treatment of residue before disposal and retrieval of residue after disposal.

(1) The liner system shall consist of a protective cover, a leachate collection system, a primary liner, a leachate leak detection zone, a secondary liner and a subbase (the bottom of the liner system).

(A) The subbase of the liner system shall be at least five feet above the maximum high water table and five feet above the surface of bedrock. The maximum high water table shall be determined as follows:

(i) The maximum high water table may be determined either on the basis of mottling indicators if such mottling indicators are identified by a certified soil scientist, or on the basis of data resulting from monthly sampling of groundwater monitoring wells in the solid waste disposal area for at least one year.

(ii) If the methodologies specified in subparagraph (g) (1) (A) (i) for determining the maximum high water table result in a determination that the maximum high water table is lower than the 100-year flood elevation, for purposes of constructing the subbase of the liner the maximum high water table shall be assumed to be at the 100-year flood elevation.

(iii) With regard to the provisions of subparagraph (g) (1) (A) (ii), the Commissioner may, in a permit proceeding, waive the requirement that the subbase of the liner system be placed above the 100 year flood elevation, provided that the site is protected from flooding by permanent protective structures. The maximum high water table shall be determined in the absence of any system of underdrainage or groundwater pumping.

(B) The protective cover of the liner system shall:

(i) Be comprised of earthen material that contains no sharp edges, aggregate, rocks, debris, plant material or non-natural material larger than 1/4 inch in diameter;

(ii) Be graded uniformly, properly compacted and smoothed;

(iii) Be installed in a manner that avoids damage to the liner;

(iv) Have recompacted permeability greater than 1 X 10-4 cm/sec, as demonstrated by field and laboratory tests, and allow the free flow of liquids and leachate generated by residue; and

(v) Be at least twelve inches thick.

(C) (i) The liner system shall be a dual synthetic liner system consisting of 12 inches of granular earthen filter material, underlain by geotextile, underlain by 12 inches of granular free-draining material or equivalent synthetic drainage structures containing a leachate collection system, underlain by a flexible membrane liner, underlain by 12 inches of granular earthen material, underlain by 12 inches of granular free-draining material or equivalent synthetic drainage structures containing a leachate detection system, underlain by a flexible membrane liner, underlain by compacted native soil.

(ii) The edge of the liner shall be clearly marked in the field by the placement of permanent markers at each corner and every 100 feet around the perimeter of such liner.

(iii) Residue shall not be placed within five feet of the edge of the liner.

(iv) To prevent the lateral escape of leachate, the liner shall be provided with a lined berm that is at least four feet high.

(v) The flexible membrane portions of the liner shall not have a permeability which exceeds 1 X 10-11 cm/sec as demonstrated by field and laboratory tests; shall be at least 60 mils thick; shall be unaffected by the constituents of leachate and of sufficient strength to resist physical damage when installed; shall be installed under the direct supervision of a representative of the manufacturer; and shall be inspected for damage during installation.

(2) The leachate collection system of the liner system shall:

(A) Utilize perforated pipes or other means of intercepting free-flowing liquids and leachate within the layer of granular material in the liner above the flexible membrane;

(B) Utilize pipes and structures for collection that meet ASTM and AASHTO specifications and are capable of preserving the integrity of the system;

(C) Be designed to ensure that free-flowing liquids and leachate will drain continuously from the protective cover to a collection sump or point without ponding or accumulating on the liner;

(D) Be designed to maximize the effectiveness of leachate collection and to facilitate maintenance and cleaning; and

(E) Utilize rounded stone, aggregate materials, geotextiles, or other materials acceptable to the Commissioner to prevent soil intrusion or damage to the leachate collection system.

(3) The leachate detection zone of a liner system shall be designed to detect failure of the liner system, to prevent stretching, tearing, distortion or loss of the liner, to facilitate collection of leachate for analysis, and to facilitate maintenance and cleaning, and shall:

(A) Be at least 12 inches thick;

(B) Be composed of earthen material of which no particle exceeds 1/4 inch in diameter, and shall have an in-situ permeability of greater than 1 X 10-3 cm/sec, as demonstrated by field and laboratory tests; or

(C) Be comprised of synthetic materials which have drainage characteristics equivalent to 12 inches of the material specified in subparagraph (3) (B) of this subsection.

(D) Contain a system of pipes or structures capable of detecting and conveying leachate leakage to a monitoring sump or point for sampling and analysis. Such pipes or structures shall:

(i) Be sloped, sized and spaced so as to ensure that liquids will drain from the detection zone, and in no event shall such pipes or structures be less than three inches in diameter or be spaced, from center to center, less than 25 feet apart;

(ii) Be made of material which is unaffected by the constituents of leachate, which meets ASTM or ASSHTO specifications, and is adequate to withstand design traffic loads; and

(iii) Utilize rounded stones, aggregate, geotextiles, or other material capable of preventing the deposition of sediment in such pipes or structures or damage to the liner.

(4) The liner system shall be constructed in accordance with the following:

(A) No site preparation or construction shall take place prior to the issuance of a permit to construct under Section 22a-208a of the General Statutes and Section 22a-209-4 and this section of the Regulations of Connecticut State Agencies. Nothing in this subparagraph shall preclude the Commissioner from considering the issuance of a permit to construct and operate a solid waste disposal area for the disposal of

residue on land which prior to the effective date of this section was altered for purposes other than preparation or construction of such a disposal area.

(B) Construction shall take place under the supervision of a registered professional engineer who shall certify to the Commissioner each phase of construction, including each layer of the liner and the leachate collection system and detection zone.

(C) Residue shall not be deposited at a solid waste disposal area until

(i) The engineer referred to in subparagraph (4) (B) of this subsection has submitted as-built plans and specifications for such solid waste disposal area to the Commissioner and they have been acknowledged by the Commissioner to conform to the provisions of the permit to construct;

(ii) A permit to operate such solid waste disposal area has been issued under Section 22a-208a of the General Statutes and Section 22a-209-4 and this section of the Regulations of Connecticut State Agencies; and

(iii) The Commissioner has been notified in writing of the duration and conditions of any warranties for the pipes, materials, and appurtenant structures and devices used in the leachate collection system.

(h) A solid waste disposal area for the disposal of residue shall be designed to minimize the infiltration of storm water into the soil and the production of leachate. A stormwater control system shall, at a minimum, provide for the following:

(1) A sequence of filling which minimizes the infiltration of stormwater into the soil;

(2) A system of dispersion berms, trenches or other drainage structures to prevent stormwater from infiltrating the soil and direct water away from the solid waste disposal area;

(3) Intermediate cover materials of low permeability;

(4) Removal of snow from the disposal area; and

(5) A stormwater discharge system that includes a sedimentation and erosion control basin capable of containing a 25-year design storm. For the purpose of this subdivision, a 25-year design storm is a storm which produces three inches of rainfall in a 24-hour period. A stormwater discharge system is subject to the permit requirements of Section 22a-430 of the General Statutes and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies.

(i) A solid waste disposal area for the disposal of residue shall be designed and operated to provide for the final cover, grading and stabilization of such solid waste disposal area in accordance with the following:

(1) Within one week after completing any cell in the final lift in any portion of the solid waste disposal area, the operator of such solid waste disposal area shall:

(A) Over the daily cover required by Section 22a-209-7 of the Regulations of Connecticut State Agencies, install a cap on the affected cell composed of uniform and compacted clay or synthetic material, such clay or synthetic material to have a permeability no greater than 1 X 10-7 cm/sec. The cap shall cover the final lift and shall be at least 12 inches thick. A cap composed of synthetic material shall conform to the requirements of subparagraph (g) (1) (C) (v) of this section, except that such a cap shall be at least 30 mils thick.

(B) Cover the cap described in subparagraph (A) of this subdivision with a compacted and uniform layer of earthen material at least 2 feet thick. Such earthen material shall compact easily, shall not crack excessively when dry, and shall facilitate the germination and propagation of vegetative cover adequate to stabilize the final cover.

(C) Grade the cover described in subparagraph (B) of this subdivision to a slope that is less than 15%, unless the operator has demonstrated that by the use of special engineering techniques the cover can be permanently stabilized at a greater slope. No portion of the final slope shall exceed 33%. If the Commissioner has approved a final slope in excess of 15%, then the final cover shall have terraces at least ten feet in width for every 20 feet of maximum rise in elevation. The grade of the terraces shall be 5%, and drainage of stormwater shall be directed back into the slope of the landfill.

(2) Within one month after the final cover described in subdivision (1) of this subsection is completed, or as soon thereafter as weather permits, vegetation shall be established on such cover for the purpose of permanently stabilizing such cover and preventing erosion by wind or water. Such vegetation shall be seeded and maintained as follows:

(A) Plant species utilized may be native or introduced but in any event shall be quick-germinating, fast-growing, hardy, perennial, capable of self-generation and plant succession and of adequately controlling erosion in all seasons.

(B) Mulch, geotextiles, rip-rap or other appropriate materials shall be utilized after seeding, as needed, to control erosion, promote germination of seeds and enhance moisture retention in the soil.

(C) Vegetation, once established, shall be maintained to prevent the creation of any condition that could result in soil erosion, including the growth of any plant species with a root structure that could damage the final cover.

(D) If weather conditions preclude the immediate seeding of vegetation on the final cover, the facility operator shall utilize mulch, geotextiles, rip-rap, or other appropriate materials to temporarily stabilize the final cover. As soon as weather permits, vegetation shall be seeded in accordance with the requirements of this subdivision.

(j) The operator of a solid waste disposal area for the disposal of residue shall utilize any means, including but not limited to inspection of material to be disposed, necessary to ensure that no residue deposited in a cell contains material capable of penetrating or puncturing any portion of the liner.

(k) Leachate from a leachate collection system installed pursuant to subsection (g) of this section and leachate from a leachate treatment system installed pursuant to a permit issued under Section 22a-430 of the General Statutes and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies shall be discharged only in accordance with the terms of such permit, and shall be subject to all requirements specified in such permit.

(Effective February 28, 1990)

Sec. 22a-209-15. Biomedical waste

(a) **Definitions.** For the purposes of this section:

''Air pollution control residue'' means unburned particles and air pollution control reactants which become entrained in the stack gases of an incinerator and which are removed and collected by air pollution control equipment.

''Antineoplastic agent'' means any substance approved for human use which is produced or used to stop or reverse the growth of malignant cells.

''Biological'' means a preparation made from a living organism or its products, including vaccines and cultures, intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

''Biomedical waste'' means untreated solid waste, any disposable container thereof and any reusable container thereof which has not been decontaminated,

generated during the administration of medical care or the performance of medical research involving humans or animals, including infectious waste, pathological waste and chemotherapy waste, but excluding (1) any solid waste which is a hazardous waste pursuant to Section 22a-115 of the General Statutes or a radioactive material regulated pursuant to Section 22a-148 of the General Statutes; (2) untreated solid waste generated during the administration of medical care in a single or multiple family residence by a resident thereof; (3) discarded materials used for personal hygiene, such as diapers, facial tissues, and sanitary napkins, unless such materials are isolation waste; (4) syringes, hypodermic needles and other medical equipment used by farmers for the treatment of their livestock in the course of conducting farming, provided that such equipment is not excluded when used by a veterinarian or at the direction of a veterinarian; and (5) samples of biomedical waste collected and transported by Department personnel for enforcement purposes. As used in this definition of biomedical waste, the term ''multiple family residence'' does not include any facility specified in the definition of biomedical waste generator set forth in this section.

''Biomedical waste generator'' or ''generator'' means any person who owns or operates a facility that produces biomedical waste in any quantity, including but not limited to the following: general hospitals, skilled nursing facilities or convalescent hospitals, intermediate care facilities, in-patient care facilities for the developmentally disabled, chronic dialysis clinics, free clinics, health maintenance organizations, surgical clinics, acute psychiatric hospitals, laboratories, medical buildings, physicians offices, veterinarians, dental offices and funeral homes.

''Biomedical waste incinerator residue'' means bottom ash, air pollution control residue and other residuals of the combustion process of an incinerator utilized for the combustion of biomedical waste.

''Biomedical waste treatment facility'' means a solid waste facility capable of storing, treating or disposing of any amount of biomedical waste, excluding any facility where the only biomedical waste stored, treated or disposed of is biomedical waste generated at the site where such facility is located.

''Biomedical waste transporter'' or ''transporter'' means a person engaged in the transportation of biomedical waste by air, rail, highway, or water.

''Blood product'' means any substance derived from human blood, including but not limited to plasma, platelets, red or white blood cells, and interferon.

''Body fluid'' means any substance which emanates or derives from the human body, including but not limited to blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid and pericardial fluid, but excluding feces, urine, nasal secretions, sputum, sweat, tears, vomitus, saliva, and breast milk, unless any such excluded substance contains visible blood or is isolation waste.

''Bottom ash'' means unburned or unburnable solid residue from incineration processes that does not become airborne.

''Central collection point'' means a location, whether located on or off the generator's site, where such generator consolidates biomedical waste accumulated from original generation points before transporting it for treatment, storage, or disposal, provided that such central collection point is operated by such generator.

''C.F.R.'' means the Code of Federal Regulations.

''Chemotherapy waste'' means waste which has come in contact with an antineoplastic agent during the preparation, handling or administration of such an agent. A container which is or has been used to contain such an agent shall be deemed chemotherapy waste even if such container is empty.

''Container'' means any receptable in which material is placed. ''Primary container'' means the initial container in which biomedical waste is placed when multiple containers for packaging of biomedical waste are required under subsection (b) of this section. ''Secondary container'' means a container in which a primary container is placed.

''Decontaminate'' means to substantially reduce or eliminate, by disinfection or other means, any biological hazard that is or may be associated with biomedical waste.

''Etiologic agent'' means an organism defined to be an etiologic agent in 49 C.F.R. Section 173.386.

''Incinerator'' means any device, apparatus, equipment or structure as defined in Sections 22a-174-1 and 22a-174-18 (c) (1) of the Regulations of Connecticut State Agencies.

''Infectious agent'' means any organism, such as a virus or bacterium, that is capable of being communicated by invasion and multiplication in body tissue and capable of causing disease or adverse health impacts in humans.

''Infectious waste'' means waste which is capable of causing an infectious disease, is one of the wastes listed below, or is waste identified as infectious by a licensed health care provider. Waste shall be deemed capable of causing an infectious disease if there is reason to believe that it has been contaminated by an organism that is known or suspected to be pathogenic to humans and if such organism may be present in sufficient quantities and with sufficient virulence to transmit disease. The following are listed as infectious waste:

(1) Any discarded culture or stock of infectious agents and associated biologicals, including human and animal cell cultures from clinical, hospital, public health, research and industrial laboratories; any waste from the production of biologicals; any discarded etiologic agent; any discarded live or attenuated vaccine or serum; and any discarded culture dish or device used to transfer, inoculate, or mix cell cultures.

(2) Any body fluid, waste human blood, or waste blood product, any container of any of the foregoing, and any disposable item that is saturated or dripping with a body fluid or that was saturated or dripping with a body fluid and has since caked with dried body fluid.

(3) Any discarded used sharp and any residual substance therein.

(4) Any discarded unused hypodermic needle, scalpel blade, suture needle or syringe.

(5) Any discarded animal carcass, animal body part or animal bedding, when such carcass, part or bedding is known to be contaminated with or to have been exposed to an infectious agent.

(6) Isolation waste.

(7) Any material collected during or resulting from the cleanup of a spill of infectious or chemotherapy waste.

(8) Any waste which is neither a hazardous waste pursuant to Section 22a-115 of the General Statutes nor a radioactive material subject to Section 22a-148 of the General Statutes and which is mixed with infectious waste.

''Interment'' means burial in a cemetary or burial place.

''Isolation waste'' means discarded material contaminated with body fluids from (A) humans who are isolated to protect others from a highly communicable disease, and (B) animals which are isolated because they are known to be infected with an infectious agent capable of causing a highly communicable disease. A highly communicable disease is one listed in Biosafety Level 4 of the Centers for Disease

Control/National Institutes of Health Guidelines entitled *Biosafety in Microbiological and Biomedical Laboratories* and dated May, 1988.

''Original generation point'' means the location on a site where biomedical waste is generated.

''Pathological waste'' means any human tissue, organ, or body part removed during surgery, autopsy or other medical procedure. Pathological waste does not include formaldehyde or other preservative agent, or a human corpse or part thereof regulated pursuant to Section 7-64 or Chapter 368i, 368j or 368k of the General Statutes.

''Publicly owned treatment works'' or ''POTW'' means publicly owned treatment works or POTW as defined in Section 22a-430-3 (a) (3) of the Regulations of Connecticut State Agencies.

''Sharp'' means an item capable of causing a puncture or cut, including but not limited to a hypodermic needle, scalpel blade, and broken glassware, provided that (1) broken glassware shall not be deemed a sharp unless it is known to be contaminated with an infectious agent, and (2) a syringe, regardless whether a hypodermic needle is attached thereto, shall be deemed a sharp.

''Shipping paper'' means a shipping order, bill of lading, manifest, or other shipping document as defined in 49 C.F.R. Section 171.8.

''Small quantity generator'' means a biomedical waste generator that generates less than 50 pounds of biomedical waste in any calendar month or who transports, or delivers for transport, in any single shipment less than 50 pounds of biomedical waste.

''Spill'' means any unplanned release, leaking, pumping, pouring, emitting, or depositing of biomedical waste or any planned release, leaking, pumping, pouring, emitting, or depositing of biomedical waste in violation of the requirements of this section.

''Storage'' means the temporary holding of biomedical waste, other than temporary holding conducted in accordance with the conditions described in subparagraphs (A), (B), (C), (D), (E) and (F) of subdivision (g) (15) of this section, at any location before treating or disposing of it or transporting it for treatment, disposal, or further storage.

''Tracking form'' means the tracking form described and required under subsection (h) of this section.

''Transfer'' means to move, or the movement of, biomedical waste from one location on the site where such waste was generated to another location on such site.

''Transport'' means to move biomedical waste by air, rail, highway, or water from the site at which such waste was generated to any other site.

''Transportation'' means the act of transporting or the state of being transported.

''Transport vehicle'' or ''vehicle'' means any conveyance used for the transportation of biomedical waste. Each cargo-carrying compartment of a vehicle, such as a truck trailer or railroad freight car, is a separate vehicle.

''Treat'' means to decontaminate biomedical waste and to physically alter it so as to render it unrecognizable as biomedical waste.

''Treatment'' means the act of treating or the state of being treated.

''Universal biohazard symbol'' means the symbol shown in 29 C.F.R. Section 1910.145 (f) (8) (ii).

''Violent mechanical stress'' means tensile or compressive forces acting upon packaging material so as to cause such material to tear, rip, burst, or otherwise fail.

(b) **Requirements for Generators of Biomedical Waste.**

(1) A biomedical waste generator shall identify the solid waste he generates which is biomedical waste.

(2) A biomedical waste generator shall segregate biomedical waste from other solid waste to the extent practicable prior to placing biomedical waste in primary containers. Biomedical waste shall be segregated into the following categories:

(A) Sharps and any residual substances therein

(B) Body fluids in a quantity greater than 20 cubic centimeters

(C) Other biomedical waste

(3) A biomedical waste generator shall prepare a written biomedical waste management plan for each facility at which he generates biomedical waste. Such plan shall set forth policies and procedures for segregating biomedical waste as required by subdivision (2) of this subsection and for assuring that the following requirements are satisfied:

(A) Biomedical waste mixed with hazardous waste pursuant to Section 22a-115 of the General Statutes shall be managed as hazardous waste in accordance with law.

(B) Biomedical waste mixed with radioactive material subject to Section 22a-148 of the General Statutes shall be managed as radioactive material in accordance with law.

(C) Any solid waste which is neither hazardous pursuant to Section 22a-148 of the General Statutes nor is a radioactive material subject to Section 22a-148 of the General Statutes and which is mixed with biomedical waste shall be managed as biomedical waste in accordance with law.

(D) Any category of biomedical waste set forth in subdivision (2) of this subsection shall not be mixed with, or placed in a primary container with, any other such category of biomedical waste.

(4) Before transporting or offering for transport biomedical waste, a generator shall package the waste according to the following requirements:

(A) Biomedical waste shall be placed in containers that are:

(i) Rigid;

(ii) Leak-resistant;

(iii) Impervious to moisture;

(iv) Sufficiently strong to prevent tearing or bursting under normal conditions of use and handling; and

(v) Sealed to prevent leakage.

(B) Sharps and any residual substances therein shall be placed in containers that are puncture-resistant and meet the requirements of subparagraph (A) of this subdivision.

(C) Body fluids in quantities greater than 20 cubic centimeters shall be placed in containers that are break-resistant and tightly lidded or stoppered and meet the requirements of subparagraph (A) of this subdivision.

(D) A generator may use as many containers as necessary to satisfy the requirements of subparagraphs (A), (B) and (C) of this subdivision.

(E) An individual item of biomedical waste that is too large to be placed in a standard-sized container shall be deemed an ‘‘oversized item’’ and shall be handled in a manner that minimizes contact with transport workers and the public. A water-resistant identification tag identifying in indelible writing the generator’s name, address, and phone number shall be enclosed with or affixed to an oversized item. A generator shall indicate any special handling instructions for an oversized item in Box 14 of the tracking form.

(F) A container for biomedical waste shall not be reused to contain biomedical waste or for any other purpose unless (i) the surfaces of such container were protected from contamination by infectious agents through the use of a liner, bag or other device which was removed with the waste, or (ii) such container has been thoroughly

washed to remove any visible indication of contamination and then disinfected by one of the procedures specified in subdivision (e) (6) of this section.

(5) Persons packaging biomedical waste shall wear such personal protective equipment as is required by law.

(6) Biomedical waste that is intended to be stored, treated, or disposed of at the site where it is generated shall be segregated and packaged in primary containers in accordance with the requirements of this subsection.

(7) Before transporting or offering for transport biomedical waste, a generator shall affix to, or cause to be imprinted on, the outside of each container a water-resistant label displaying in indelible writing the universal biohazard symbol or the words ''medical waste'' or ''infectious waste.'' Such a label need not be affixed to or imprinted on a container of biomedical waste which has been decontaminated but not treated, but such a container shall be marked in accordance with subdivision (8) of this subsection.

(8) Before transporting or offering for transport biomedical waste, a generator shall mark containers as follows:

(A) A water resistant identification tag of at least three inches by five inches shall be affixed to the outside of both the primary and secondary containers and shall indicate in indelible writing the generator's name and address. In addition, the tag affixed to the secondary container shall indicate in indelible writing the name, address, business location and permit number of the transporter who accepted the waste from the generator and the date on which such transporter accepted the waste.

(B) When biomedical waste is transported by more than one transporter, each transporter other than the transporter who accepted the waste from the generator shall affix a water-resistant identification tag on the outside of the secondary container. Such tag shall be at least three inches by five inches and shall be affixed in such manner as not to obscure previously affixed identification tags. Such tag shall indicate in indelible writing the name, address, business location, and permit number of the transporter affixing the tag and the date such transporter accepted the waste.

(9) No person shall hire or use a transporter for the transportation of biomedical waste unless such transporter has been issued a permit by the Commissioner under subsection (g) of this section.

(c) **Requirements for Storage of Biomedical Waste.**

(1) Biomedical waste shall be stored such that other materials may not become mixed with such waste, and shall be stored in areas which are accessible only to those persons who are authorized by the generator, transporter, or solid waste facility operator, as applicable, to handle biomedical waste. Any outdoor storage area, such as a dumpster, shed or trailer, shall be locked.

(2) Biomedical waste shall be stored in a manner and location that maintains the integrity of its packaging and provides protection from water, precipitation and wind.

(3) All areas used for the storage of biomedical waste shall be constructed of finished materials that are impermeable and capable of being easily maintained in a sanitary condition.

(4) Biomedical waste shall be stored only in a nonputrescent state; to maintain a nonputrescent state, biomedical waste may be refrigerated during storage.

(5) A sign displaying the universal biohazard symbol shall be posted wherever biomedical waste is stored.

(6) Biomedical waste shall not be compacted or subjected to violent mechanical stress during storage.

(7) Biomedical waste shall be stored in a manner that provides protection from animals and does not provide a breeding place or food source for insects or rodents.

(d) **Requirements For Transfer of Biomedical Waste.**

(1) Biomedical waste shall be handled during transfer in a manner that does not impair the integrity of its packaging.

(2) Trash chutes shall not be used to transfer biomedical waste.

(3) Biomedical waste shall not be compacted or subjected to violent mechanical stress during transfer.

(e) **Requirements for Transportation of Biomedical Waste.**

(1) A biomedical waste transporter shall not transport or accept for transport biomedical waste that is not packaged, labeled and marked in accordance with subdivisions (4), (7), and (8) of subsection (b) of this section.

(2) A biomedical waste transporter shall not transport or accept for transport biomedical waste which is not accompanied by a tracking form which complies with subsection (h) of this section.

(3) A biomedical waste transporter shall ensure that any vehicle used to transport biomedical waste meets the following requirements:

(A) Biomedical waste shall be transported in a fully enclosed, leak-resistant cargo compartment.

(B) Biomedical waste shall not be subjected to compaction or violent mechanical stress during loading and unloading.

(C) Each cargo compartment shall be constructed of impermeable materials and kept free of visible contamination.

(D) No cargo compartment shall be used to transport any food or drink intended for human or animal consumption.

(E) Each cargo compartment shall be locked when left unattended.

(4) Biomedical waste shall be transported only in a nonputrescent state; to maintain a nonputrescent state, biomedical waste may be refrigerated during transport.

(5) A biomedical waste transporter shall ensure that his name, permit number and the words ''medical waste'' are displayed on the two sides and back of each cargo compartment in letters that are at least three inches tall and in a color contrasting with the color of such compartment.

(6) Vehicle surfaces that have had contact with spilled or leaked biomedical waste shall be decontaminated by (A) cleaning with a solution of industrial strength detergent for the purpose of removing visible soil, and (B) one of the following procedures:

(i) Exposure to water of at least 180° F for at least 30 seconds.

(ii) Exposure to a chemical sanitizer by rinsing with or immersion in one of the following for at least 3 minutes: hypochlorite solution (500 ppm available chlorine), phenolic solution (500 ppm active agent), iodoform solution (100 ppm available iodine), or quaternary ammonium solution (400 ppm active agent).

(7) Any person loading or unloading biomedical waste onto or off of a vehicle shall wear such personal protective equipment as is required by law.

(8) Each vehicle shall carry a spill clean-up kit which includes at least the following:

(A) Enough absorbent material to absorb at least ten gallons of liquid.

(B) One gallon of hospital-grade disinfectant in a sprayer capable of dispersing its charge both in a mist and in a stream at a distance of ten feet.

(C) Fifty red plastic bags, seals, and labels. Such bags shall (i) meet the specifications of subparagraph (b) (4) (A) of this section, and (ii) be large enough to enclose any standard-sized container used for biomedical waste.

(D) Enough clean impermeable overalls, gloves, boots, caps, and surgical masks for use by at least two persons. Overalls, boots and caps should be fitted to the persons intended to wear them and shall be made of Tyvek (Registered Trademark) or material that provides equivalent protection. Top boot coverings shall be at least 75 mil thick, boot soles shall be at least 3/4 inch thick, and boot heels shall be at least 1-1/4 inches thick. Gloves shall be of heavy neoprene or material that provides equivalent protection, and shall be at least 25 mils thick. Duct tape for sealing clothing at the wrists and ankles shall be included in each clean-up kit.

(E) A fire extinguisher, boundary marking tape, a high-intensity flashlight, and an American National Red Cross standard 24-unit first aid kit or its equivalent.

(9) In the event of a biomedical waste spill, personnel wearing clean-up apparel and using equipment described in subparagraph (8) (D) of this subsection shall immediately:

(A) Secure the area where the spill took place;

(B) Apply a sufficient amount of absorbent material in and around the spill area such that all liquid spillage is contained and absorbed;

(C) Place damaged containers and spilled biomedical waste into bags specified in subparagraph (8) (C) of this subsection;

(D) Decontaminate the area affected by the spill and take other clean-up measures as appropriate under the circumstances;

(E) Clean and decontaminate used reusable components of the clean-up kit;

(F) Clean and decontaminate reusable components of apparel and related equipment before disrobing;

(G) Remove apparel and related equipment and place disposable items thereof in bags specified in subparagraph (8) (C) of this subsection; and

(H) Replace used non-reusable components of the clean-up kit.

(f) **Requirements for Treatment and Disposal of Biomedical Waste.**

(1) A solid waste facility shall not accept biomedical waste which is not packaged, labeled, and marked in accordance with subdivisions (4), (7), and (8) of subsection (b) of this section.

(2) A solid waste facility shall not accept biomedical waste which is not accompanied by a tracking form which complies with subsection (h) of this section.

(3) Biomedical waste shall be disposed of as follows:

(A) Chemotheraphy waste shall be disposed of only by incineration.

(B) Pathological waste shall be disposed of only by incineration or interment.

(C) Infectious waste shall be disposed of only by (i) incineration; (ii) discharge to a sanitary sewer, provided that such waste is in liquid or semi-solid form, that secondary treatment is available at the publicly owned treatment works or privately owned treatment works to which such waste is discharged, that local law does not prohibit such discharge, that all permits and other authorizations required by law have been obtained for such discharge, and that aerosol formation is minimized during such discharge to such sewer; or (iii) any other method which provides protection of the public health and the environment at least equivalent to that provided by the disposal methods specified in this subparagraph and which is first described in writing to the Commissioner and approved in writing by the Commissioner.

(4) No person shall:

(A) Deliver biomedical waste or cause biomedical waste to be delivered to any incinerator, whether located inside or outside of Connecticut, unless such incinerator complies with all applicable law; or

(B) Operate an incinerator at which biomedical waste is burned unless such incinerator complies with all applicable law, including but not limited to Sections 22a-174-1 through 22a-174-29 of the Regulations of Connecticut State Agencies.

(5) Biomedical waste incinerator residue shall be managed as a special waste in accordance with Section 22a-209-8 (f) of the Regulations of Connecticut State Agencies.

(6) A steam sterilizer used to decontaminate biomedical waste shall be operated in accordance with the following requirements:

(A) In a gravity flow sterilizer, biomedical waste shall be subjected to a temperature of not less than 250° F (121° C) at 15 pounds per square inch of gauge pressure for no less than 60 minutes.

(B) In a vacuum type sterilizer, biomedical waste shall be subjected to a temperature of not less than 270° F (132° C) at 27 pounds per square inch gauge pressure for no less than 45 minutes.

(C) Notwithstanding subparagraphs (A) and (B) of this subdivision, a different combination of operational time, temperature and pressure may be utilized for steam sterilization of biomedical waste if such combination is first described in writing to the Commissioner and approved in writing by the Commissioner. The Commissioner will not grant approval unless such combination is proven on the basis of thorough tests, including tests of its capacity to kill *Bacillus stearothermophilus,* to completely and reliably kill all microorganisms in waste at design capacity.

(D) Biomedical waste shall be steam sterilized in its primary container. The primary container shall be placed in the sterilization chamber so that sufficient space is provided between the chamber walls and the container to allow the steam to penetrate the container. The primary container shall then be unsealed to allow the steam to penetrate the contents of the container.

(E) Unless a steam sterilizer is equipped to continuously monitor and record temperatures during the entire length of each sterilization cycle, the operator of such sterilizer shall affix to the primary container temperature-sensitive tape which will indicate when the desired temperature is reached. Biomedical waste shall not be considered decontaminated unless the temperature-sensitive tape indicates that a temperature of at least 250° F (121° C) was reached during the sterilization process. A steam sterilizer which is used for the first time after the effective date of this section shall automatically and continuously monitor and record temperatures throughout the entire length of each steam sterilization cycle.

(F) At least once during every forty hours of operation, tests shall be conducted to evaluate the effectiveness of the sterilization process, including tests of the capacity of such process to kill *Bacillus stearothermophilus.* A log shall be maintained recording the dates and results of such tests.

(G) At least once during every forty hours of operation, a sterilization unit shall be evaluated to determine whether it is operating properly with respect to temperature and pressure. A log shall be maintained recording the dates and results of such evaluations and the dates of calibration.

(H) For each sterilization unit a log shall be maintained recording, for each use, the date, time, operator, type and approximate amount of biomedical waste treated, the sterilization pressure reading and the post-sterilization reading on the temperature-sensitive tape.

(7) Unless it is physically altered so as to render it unrecognizable as biomedical waste, decontaminated biomedical waste shall be subject to the requirements of this section.

(8) If biomedical waste is treated or disposed of at the site where it was generated, the generator shall develop written procedures for each treatment or disposal method in use at such site and for ensuring compliance with such procedures. Such procedures shall be incorporated into the biomedical waste management plan required by subdivision (b) (3) of this section and shall (A) assure the effectiveness of any treatment method in use and reflect acceptable standards of practice; (B) provide for and conduct an ongoing program of staff training on the implementation of such procedures and the requirements of this section; and (C) provide for a quality assurance/quality control program to assure compliance with the biomedical management plan prepared pursuant to subsection (b) of this section.

(g) **Requirements for Biomedical Waste Transporters.**

(1) Other than an air carrier, no person shall transport or accept for transport biomedical waste unless such person has been issued a permit by the Commissioner under this subsection to transport biomedical waste.

(2) A small quantity generator may transport his own biomedical waste without a permit issued by the Commissioner under this subsection, provided that:

(A) Such generator complies with the requirements of subdivisions (1) through (5), (7) and (8) of subsection (b) of this section;

(B) The biomedical waste is transported to (i) a lawfully operating solid waste facility with which such generator has a written agreement to deliver his biomedical waste, or (ii) another place of business in Connecticut of such generator; and

(C) The biomedical waste is transported (i) exclusively by such generator or by an employee whom he has authorized in writing to transport such waste; and (ii) in a vehicle owned by such generator or such employee.

(D) Such generator complies with the requirements of subdivision (i) (4) of this section.

(3) A small quantity generator who causes biomedical waste to be transported by the U.S. Postal Service is exempt from the requirements of this subsection and subsections (h) and (i) of this section, provided that:

(A) Such biomedical waste consists only of discarded used sharps and discarded unused hypodermic needles, scalpels, suture needs and syringes;

(B) Each package of such waste is sent registered mail, return receipt requested, indicating the name and address of the person to whom the waste was sent, the date when it was delivered, and the signature of the recipient; and

(C) Complies with the requirements of subdivision (i) (5) of this section.

(4) An applicant for a permit under this subsection shall file his application with the Department on a form prescribed by the Commissioner. Such application shall include the following:

(A) The applicant's name, address, and business location.

(B) The manufacturer, model, year of manufacture, identification number, and cargo-carrying capacity of each vehicle, used or to be used by the applicant, proof of ownership of such vehicle, and proof of current registration for such vehicle with a state motor vehicle department or agency.

(C) The address of any transfer station or of any vehicle parking area used or to be used by the applicant pursuant to subdivision (15) of this subsection.

(D) The place or places where, and the manner in which, the applicant delivers or intends to deliver biomedical waste for treatment, storage, or disposal.

(E) Evidence of security from an insurer or surety authorized to do business in the State of Connecticut. Such security shall be in an amount of not less than $100,000 and shall provide liability coverage for bodily injury and property damage,

including liability for environmental restoration resulting from negligence in the operation, maintenance, or use of any motor vehicle for transportation of biomedical waste. Security required under this paragraph:

(i) Shall remain in effect continuously while the permit is in effect;

(ii) Provide for written notification of the insurer's or surety's intent to cancel at least 35 days before cancellation; and

(iii) May be replaced by other security provided the liability of the retiring insurer or surety terminates on the effective date of the replacement security or at the end of the 35 day cancellation period required in subparagraph (E) (ii) of this subdivision, whichever is sooner.

(F) Evidence that biomedical waste transported by the applicant will be delivered to a lawfully permitted solid waste facility.

(G) Any other information reasonably required by the Commissioner to demonstrate that the applicant can be expected to safely transport biomedical waste and comply with all applicable provisions of this section during the term of the permit.

(5) A permit applicant shall make each vehicle and related equipment, and each vehicle parking area to be used by the applicant pursuant to subdivision (15) of this subsection, available for inspection by the Department in a safe and convenient location and at a reasonable time. The purpose of such inspection shall be to determine whether such vehicle complies with the requirements of subdivisions (3), (5), and (8) of subsection (e) of this section.

(6) The Commissioner shall decide whether to grant or deny a permit application based upon a review of the information and materials submitted by the applicant, the results of the vehicle inspection described in subdivision (4) of this subsection, and any other consideration authorized by law.

(7) The Commissioner shall notify an applicant in writing of the decision on the permit application. If an application is denied, the notice shall specify the reasons for denial. An application may be denied because the applicant has failed either to (A) comply with subdivision (4) or (5) of this subsection or (B) demonstrate that he can be expected to safely transport biomedical waste and comply with all applicable provisions of this section during the term of the permit. If the Commissioner grants an application the Department shall assign a permit number to the permittee.

(8) A biomedical waste transporter shall include his permit number on each tracking form.

(9) (A) A permit shall expire two years after the date of issuance. An application to renew a permit made no later than ninety days before the expiration date of such permit shall be deemed timely and sufficient for purposes of Section 4-182 (b) of the General Statutes.

(B) The Commissioner may revoke a permit issued under this subsection if the permittee (i) fails to comply with a statute, regulation or license administered, or order issued, by the Commissioner; (ii) fails to maintain in effect during the permit term the security specified in subparagraph (4) (E) of this subsection; or (iii) cannot be expected to safely transport biomedical waste or comply with all applicable provisions of this section during the term of the permit.

(10) A biomedical waste transporter shall notify the Department in writing of any change in majority ownership, name, address, or business location.

(11) A permit issued under this subsection is not transferable.

(12) Whenever any vehicle owned or operated by a biomedical waste transporter is involved in a spill of biomedical waste or whenever the vehicle is involved in an accident which renders the vehicle in non-compliance with this section, such

transporter shall immediately notify both the Department and the director of health of the municipality in which the spill or accident occurred.

(13) Upon request of the Department, a biomedical waste transporter shall:

(A) Allow the Department to inspect tracking forms, shipment logs, reports, permits, licenses, billing records or other documents related to the transportation or other handling of biomedical waste.

(B) Allow the Department to inspect any vehicle or related equipment or any vehicle parking area used by the transporter pursuant to subdivision (15) of this subsection.

(C) Decontaminate, utilizing procedures described in subdivision (6) of subsection (e), or allow the Department to decontaminate at the owner's expense, any vehicle that has been in contact with biomedical waste, or take or allow the Department to take any other measures necessary to make such vehicle safe for inspection.

(14) A generator who transports his own biomedical waste from its original generation point to a central collection point shall be exempt from the requirements of subsections (e), (g), and (h) of this section, provided that:

(A) The biomedical waste is transported by the generator or an employee authorized in writing in a vehicle owned by such generator or employee;

(B) The original generation point and the central collection point or solid waste facility are located in Connecticut; and

(C) The generator compiles and retains a shipment log as required by subsection (i) (2) of this section.

(15) A biomedical waste transporter may store biomedical waste in the same vehicle he used to pick up and transport such waste from a generator only if:

(A) Such vehicle is parked at a location that

(i) Is under the direct control of the transporter, and

(ii) Has been approved for such use by the Commissioner in the transporter's biomedical waste transporter permit issued under this subsection;

(B) The location where such vehicle is parked is secured to prevent access thereto by any person other than the transporter and his employees;

(C) Such vehicle is parked at such location for no longer than 48 consecutive hours, excluding weekends and State holidays;

(D) The biomedical waste is stored in accordance with the provisions of subsection (c) of this section;

(E) Such vehicle complies with the provisions of subdivision (e) (3) of this section; and

(F) No biomedical waste is loaded on to or off of such vehicle during storage.

(h) **Requirements for Tracking Biomedical Waste.**

(1) Except as provided in this subsection, a generator who transports or offers for transport biomedical waste shall use the tracking form in Appendix I of this section to track the movement of such waste from its site of generation to a solid waste facility or facilities for purposes of storage, treatment or disposal.

(2) Except as provided in subdivisions (g) (2), (3), and (14) of this subsection, before transporting or offering or delivering for transport biomedical waste, a generator shall prepare at least the number of tracking form copies that will provide himself and each transporter with one copy, and the operator of each solid waste facility where the waste is to be treated, stored or disposed with two copies.

(3) When preparing the tracking form, a generator shall:

(A) Follow the instructions included in Appendix I of this section;

(B) On all copies of the tracking form, sign the certification statement by hand;

(C) On all copies of the tracking form, have the transporter write his signature and the date he accepts the waste;

(D) Retain one copy of the signed and dated tracking form.

(4) Notwithstanding any other provision of this section, when a generator offers or delivers biomedical waste directly to a rail transporter for transport to a non-rail transporter or solid waste facility in Connecticut, such generator shall forward at least three copies of the tracking form, completed in accordance with subdivision (3) of this subsection, to:

(A) Such non-rail transporter, if any; or

(B) The operator of such solid waste facility.

(5) A generator who offers or delivers biomedical waste to a transporter, other than a rail transporter, for transport to a facility outside Connecticut for treatment, storage, or disposal shall request that the operator of such facility provide written confirmation to such generator that the waste was received. If the generator does not receive such confirmation within 45 days from the date he offered or delivered the waste for transport, he shall submit an exception report as required pursuant to subdivision (i) (11) of this section.

(6) (A) A transporter shall not accept biomedical waste unless it is accompanied by a tracking form completed in accordance with Appendix I of this section.

(B) Notwithstanding subparagraph (A) of this subdivision, a non-rail transporter may accept from a rail transporter biomedical waste that is not accompanied by a tracking form, provided that such non-rail transporter complies with subdivisions (8) and (13) of this subsection before delivering the waste to the next transporter or solid waste facility.

(7) Before accepting biomedical waste that is accompanied by a tracking form, a transporter shall:

(A) Verify that the tracking form accurately reflects the number of containers and the weight in pounds of all (i) untreated and (ii) decontaminated biomedical waste accepted;

(B) On all copies of the tracking form, provide his handwritten signature and the date he accepted the waste from the generator or prior transporter, as applicable; and

(C) If the transporter is the first transporter of the waste, return a copy of the signed and dated tracking form to the generator before accepting the waste, or if the transporter is a subsequent transporter of the waste, return a copy of the signed and dated tracking form to the prior transporter before accepting the waste; and

(D) Retain one copy of the signed and dated tracking form.

(8) A transporter, other than a rail transporter, shall ensure that the tracking form accompanies the biomedical waste during transport.

(9) When a transporter, other than a rail transporter, delivers biomedical waste to another transporter or a solid waste facility in Connecticut, the delivering transporter shall:

(A) On all copies of the tracking form, obtain the date of delivery and the handwritten signature of the accepting transporter or the operator of the solid waste facility;

(B) Retain one copy of the signed and dated tracking form; and

(C) Give the remaining copies of the signed and dated tracking form to the accepting transporter or the owner of the facility.

(10) When a transporter, other than a rail transporter, delivers biomedical waste to a transporter outside Connecticut or facility outside Connecticut, the delivering transporter shall:

(A) Verify that the waste has been delivered to the accepting transporter or operator of the facility;

(B) On all copies of the tracking form, have the accepting transporter or facility operator write his signature and the date he accepts the waste, or if the accepting transporter or facility operator will not provide his signature, the delivering transporter shall write his own signature and the date he delivers the waste;

(C) Retain one copy of the signed and dated tracking form; and

(D) Return all remaining copies of the signed and dated tracking form by mail to the generator.

(11) A rail transporter shall ensure that a shipping paper accompanies each shipment of biomedical waste during transport and contains all the information required on the tracking form, other than that required by Boxes 7, 10, and 15. A rail transporter who accepts biomedical waste from a prior rail transporter and delivers such waste to a subsequent rail transporter is not required to sign the shipping paper relating to such shipment of waste.

(12) When a rail transporter delivers biomedical waste to a solid waste facility in Connecticut, such transporter shall:

(A) Have the operator of the solid waste facility write his signature and the date he accepts the waste on all copies of the tracking form which was forwarded by the generator or the first non-rail transporter to the solid waste facility, or, if the tracking form has not been received by the solid waste facility, on the shipping paper; and

(B) Retain a copy of the signed and dated tracking form or shipping paper, as applicable.

(13) When a non-rail transporter accepts biomedical waste from a rail transporter, such non-rail transporter shall:

(A) Write his signature and the date he accepts the waste on all copies of the tracking form which was forwarded by the generator or first non-rail transporter to the accepting non-rail transporter, or, if the tracking form has not been received by the accepting non-rail transporter, on the shipping paper;

(B) Leave a copy of the signed and dated shipping paper with the rail transporter, if applicable; and

(C) Retain a copy of the signed and dated shipping paper or tracking form, as applicable.

(14) A transporter who accepts biomedical waste from a small quantity generator who does not voluntarily use the tracking form need not comply with the requirements of subdivision (6) of this subsection, provided that:

(A) Such transporter compiles a log containing the following information for each shipment of biomedical waste he accepts from a small quantity generator:

(i) The generator's name and address;

(ii) The number of containers and total weight of (1) untreated and (2) decontaminated waste accepted; and

(iii) The date the waste is accepted;

(B) Such transporter carries such log in his vehicle while transporting the waste to the next transporter or solid waste facility, as applicable;

(C) Such transporter signs and dates the generator's log required under subdivision (i) (3) of this subsection; and

(D) Such transporter complies with subdivision (17) of this subsection.

(15) Except as provided in subdivision (14) of this subsection, a transporter shall deliver the entire quantity of biomedical waste that he accepts from a generator or prior transporter to:

(A) The solid waste facility identified on the tracking form, or

(B) The next transporter, if any.

(16) When biomedical waste cannot be delivered in accordance with subdivision (15) of this subsection, a biomedical waste transporter shall:

(A) Contact the generator for further directions;

(B) Revise the tracking form according to the generator's instructions; and

(C) Deliver the entire quantity of biomedical waste according to the generator's instructions.

(17) A transporter shall initiate a tracking form, in accordance with the provisions of subdivisions (2) and (3) of this subsection, for all biomedical waste accepted from each small quantity generator who does not voluntarily use the tracking form.

(18) (A) A transporter may consolidate multiple shipments of biomedical waste on a single tracking form, provided that each such shipment weighs less than 220 pounds and such transporter initiates a new tracking form for such consolidated waste in accordance with the provisions of subdivisions (2) and (3) of this subsection.

(B) When a transporter receives from a solid waste facility a copy of a tracking form which he initiated pursuant to subparagraph (A) of this subdivision, and which the operator of such facility signed and dated in accordance with subdivision (20) of this subsection, such transporter shall:

(i) Attach a copy of the tracking form received from the solid waste facility to the copy of the tracking form originally prepared by the generator;

(ii) Retain a copy of the tracking form received from the solid waste facility; and

(iii) Return a copy of the tracking form received from the solid waste facility, together with a copy of the tracking form originally prepared by the generator, to the generator within 15 days of receiving the tracking form from the solid waste facility.

(19) For each tracking form initiated pursuant to subparagraph (18) (A) of this subsection, a transporter shall compile a consolidation log reflecting all shipments of biomedical waste consolidated on that form. The consolidation log shall accompany the tracking form during transportation of the waste and shall contain the following information for each shipment:

(A) Name and address of generator;

(B) Date on which the shipment was accepted by such transporter;

(C) Number of containers and the weight in pounds of all (i) untreated and (ii) decontaminated biomedical waste in the shipment; and

(D) Name, address and state biomedical waste transporter permit number of each previous transporter, if any.

(20) When a solid waste facility accepts biomedical waste accompanied by a tracking form, the operator of such facility shall:

(A) Indicate in Box 23 of all copies of the tracking form any of the following:

(i) Any variation between the number of containers reportedly shipped by the generator and the number actually received by such solid waste facility;

(ii) Any variation between the number of containers of (i) untreated and (ii) decontaminated biomedical waste reportedly shipped by the generator and the number actually received by the solid waste facility;

(iii) Any containers that are broken, torn, or leaking; and

(iv) Lack of any required information or signatures on the tracking form;

(B) On all copies of the tracking form, write the delivery date of the waste and his handwritten signature, such signature constituting certification that the waste reflected on the tracking form was actually accepted by such solid waste facility;

(C) Before the transporter leaves the facility, give him at least one copy of the signed and dated tracking form;

(D) Within 15 days of accepting the waste, send a copy of the signed and dated tracking form to the generator or transporter who initiated the tracking form; and

(E) Retain a copy of the signed and dated tracking form.

(21) (A) When a solid waste facility accepts biomedical waste from a rail transporter before receiving the tracking form forwarded by the generator or first non-rail transporter, the operator of the solid waste facility shall:

(i) Provide on the rail transporter's shipping paper the information described in subparagraphs (20) (A) and (B) of this subsection;

(ii) Before accepting the waste, give the rail transporter at least one copy of the signed and dated shipping paper;

(iii) Within 15 days of accepting the waste, send a copy of the signed and dated shipping papers to the generator or first non-rail transporter who initiated the shipping paper; and

(iv) Retain a copy of the signed and dated shipping paper.

(B) Upon receiving a tracking form forwarded by a generator or first non-rail transporter, the operator of a solid waste facility shall: (i) provide on the tracking form the information described in subparagraphs (20) (A) and (B) of this subsection, (ii) within 15 days of receiving such tracking form send a copy of the signed and dated tracking form to the generator or first non-rail transporter who initiated the tracking form, and (iii) retain a copy thereof.

(22) When the operator of a solid waste facility accepts biomedical waste and (i) discovers any condition described in subparagraph (20) (A) of this subsection or (ii) the waste is unaccompanied by a tracking form, such operator shall attempt to resolve the problem with the generator or transporter. If such operator is unable to resolve the problem, he shall submit a letter, within 15 days of accepting the waste, to the Department describing the nature of the problem and his attempts to resolve it. The letter shall be accompanied by a legible copy of the tracking form or shipping paper in question when the problem is of the type specified in subparagraph (20) (A) of this subsection. If the problem is of the type specified in subparagraph (20) (A) (iv) of this subsection, the operator shall specify in his letter the number of containers and the weight in pounds of all (A) untreated and (B) decontaminated biomedical waste accepted, and the name and address of each generator and transporter of the waste.

(i) **Recordkeeping and Reporting Requirements for Generators, Transporters, and Solid Waste Facilities.**

(1) Except as provided in subdivisions (3), (4) and (5) of this subsection a generator shall retain a copy of each tracking form signed in accordance with subparagraphs (h) (3) (B) and (C) of this section for at least three years from the date he offers or delivers biomedical waste to a transporter.

(2) A generator who seeks under subdivision (g) (14) of this section to be exempt from the requirements of subsections (e), (g), and (h) of this section shall comply with the following requirements:

(A) At the original generation point such generator shall compile a shipment log which includes an entry for each shipment of biomedical waste, and shall retain each such entry for at least three years from the date the waste is transported.

(B) Each entry in the shipment log required in subparagraph (A) of this subdivision shall consist of the following:

(i) The date the biomedical waste is transported from the original generation point;

(ii) The weight of (i) untreated and (ii) decontaminated biomedical waste transported;

(iii) The address or location of the central collection point or solid waste facility, as applicable; and

(iv) The signature of the individual who transports the waste.

(C) At the central collection point such generator shall compile a shipment log which includes an entry for each shipment of biomedical waste, and shall retain each such entry for at least three years from the date the waste is received at the central collection point from the original generation point.

(D) Each entry in the shipment log required in subparagraph (C) of this subdivision shall consist of the following:

(i) The date the biomedical waste is received at the central collection point;

(ii) The weight of (1) untreated and (2) decontaminated biomedical waste received;

(iii) The address or location of original generation point; and

(iv) The signature of the individual who manages the central collection point.

(3) A small quantity generator who uses the services of a transporter to transport biomedical waste and who does not voluntarily prepare the tracking form is subject to the following recordkeeping requirements:

(A) Such small quantity generator shall compile a log which includes an entry for each shipment of biomedical waste, and shall maintain each such entry for three years from the date the waste is accepted by the transporter.

(B) Each entry in the log required in subparagraph (A) of this subdivision shall consist of:

(i) The transporter's name and address;

(ii) The transporter's state biomedical waste transporter permit number;

(iii) The weight of (1) untreated and (2) decontaminated biomedical waste transported;

(iv) The date the waste is delivered to the transporter; and

(v) The signature of the transporter or his employee, as applicable, who accepts the waste.

(4) A small quantity generator who transports biomedical waste pursuant to subdivision (g) (2) of this section shall comply with the following requirements:

(A) Such small quantity generator shall compile a log which includes an entry for each such shipment of biomedical waste, and shall retain each such entry for at least three years from the date the generator transports the waste off his site.

(B) Each entry in the log required in subparagraph (A) of this subdivision shall consist of the following:

(i) The name and address of the solid waste facility to which the biomedical waste is transported;

(ii) The weight of (1) untreated and (2) decontaminated biomedical waste transported;

(iii) The date the biomedical waste is transported; and

(iv) The signature of the individual who transports the waste.

(5) A small quantity generator who seeks under subdivision (g) (3) of this section to be exempt from the requirements of subsections (h) and (i) of this section shall:

(A) For each shipment, retain the original U.S. Postal Service receipt and the return mail receipt for at least three years from the date the waste is shipped;

(B) Compile a log which includes an entry for each shipment of biomedical waste and maintain each such entry for at least three years from the date the waste is mailed. Each entry in such log shall consist of:

(i) The weight of (1) untreated and (2) decontaminated biomedical waste mailed;

(ii) The date the biomedical waste is mailed; and

(iii) The name and address of the solid waste facility to which the biomedical waste is mailed.

(6) A generator who treats his own biomedical waste on his site shall compile an operating log which includes an entry for each treatment cycle. Each such entry shall be maintained for three years from the date the waste is treated and shall consist of:

(A) The date and time the treatment cycle begins and ends, and

(B) The weight in pounds of biomedical waste treated during each treatment cycle.

(7) A generator who accepts for treatment at his site biomedical waste generated by another generator or generators shall compile an operating log which includes an entry for each shipment of biomedical waste accepted. Each such entry shall be maintained for three years from the date the waste is accepted and shall consist of:

(A) The date the waste was accepted;

(B) The name and address of the generator who generated the waste;

(C) The weight of (i) untreated and (ii) decontaminated biomedical waste accepted; and

(D) The signature of the individual accepting the waste.

(8) A generator who accepts for treatment at his site biomedical waste generated by another generator or generators subject to the requirements of subsection (h) of this section shall retain copies of the tracking form for three years from the date he accepts waste from such other generator or generators.

(9) A generator who treats his own biomedical waste on his site or who accepts for treatment at his site biomedical waste generated by another generator or generators shall prepare an annual report based on entries recorded in the operating log described in subdivision (6) of this subsection, and stating the total number of treatment cycles performed and the total weight of biomedical waste treated. The annual report shall be submitted to the Commissioner no later than February 15 of each year and shall cover the preceding calendar year. In addition to providing the said information, the generator shall include in the annual report the following information:

(A) His name and address and the address where he treats biomedical waste, if different;

(B) Type of generator he is (for example, general acute-care hospital or clinical laboratory);

(C) Name and telephone number of contact person; and

(D) With respect to each other generator from whom the treating generator accepts biomedical waste:

(i) Type of generator (for example, acute-care hospital or clinical laboratory); and

(ii) Name and telephone number of a contact person.

(E) A statement, signed and dated by the treating generator, which reads: ''I have personally examined and am familiar with the information submitted in this document and all attachments and certify under penalty of law that based on reasonable investigation, including my inquiry of those persons immediately responsible for obtaining the information, the submitted information is true, accurate and complete.''

(10) A generator who does not, within 35 days of the date he delivers biomedical waste for transport, receive a copy of a signed tracking form from the solid waste facility to which such waste is to be delivered shall contact such facility and each known transporter of the waste to determine the status of the waste.

(11) A generator who does not, within 45 days of the date he delivers biomedical waste for transport, receive a copy of a signed tracking form from the solid waste facility to which such waste is to be delivered shall submit an exception report to the Commissioner. Such exception report shall be postmarked on or before the 46th day after the date the generator delivered the waste for transport and shall include:

(A) A legible copy of the tracking form as signed and dated by the generator and by the transporter accepting the waste; and

(B) A letter signed by the generator explaining the efforts he has taken to locate the waste and the results of such efforts.

(12) A generator shall retain a copy of an exception report submitted pursuant to subdivision (11) of this subsection for at least three years from its postmark date.

(13) A transporter shall, for each shipment of biomedical waste he transports, retain a copy of each tracking form signed by the generator, himself, any previous transporter, if applicable, and the person to whom he delivers the waste for at least three years from the date he delivers the waste.

(14) A transporter who accepts biomedical waste that is not accompanied by a generator-initiated tracking form shall, with respect to such waste, retain a copy of the tracking form and related consolidation log initiated by such transporter for at least three years from the date he accepts the waste.

(15) A transporter who accepts biomedical waste that is accompanied by a generator-initiated tracking form and who subsequently consolidates the waste to a single tracking form pursuant to subdivision (h) (18) of this section shall:

(A) Retain a copy of the generator-initiated tracking form for at least three years from the date he accepts the waste; and

(B) Retain a copy of the tracking form which he initiated and which is signed by the operator of the solid waste facility or subsequent transporter, as applicable, that accepts the waste for at least three years from the date such operator accepts the waste.

(16) A transporter who accepts biomedical waste that is generated in Connecticut or transported to Connecticut for storage, treatment or disposal shall, by each February 15, submit to the Commissioner a report identifying for the previous calendar year: each generator from whom the transporter accepted such waste and each solid waste facility to which the transporter delivered biomedical waste. Such report shall also include the following:

(A) The transporter's name, address and Connecticut biomedical waste transporter permit number;

(B) The name and telephone number of a contact person for the transporter;

(C) The name, address and type of each generator, by state, from whom the transporter accepted biomedical waste;

(D) The total number of generators, by state, from whom the transporter accepted biomedical waste;

(E) The weight in pounds of (i) untreated and (ii) decontaminated biomedical waste the transporter accepted from each generator, by state;

(F) The name and address of each solid waste facility, by state, to which the transporter delivered biomedical waste generated in Connecticut;

(G) The name and address of each solid waste facility in Connecticut to which the transporter delivered biomedical waste generated outside of Connecticut;

(H) The total weight in pounds of (i) untreated and (ii) decontaminated biomedical waste from all generators, by state, which the transporter delivered to a solid waste facility in Connecticut for treatment or disposal;

(I) The total weight in pounds of (i) untreated and (ii) decontaminated biomedical waste from all generators, by state, which the transporter delivered in Connecticut to another transporter;

(J) The total weight in pounds of (i) untreated and (ii) decontaminated biomedical waste from all generators, by state, which the transporter delivered to a solid waste facility in Connecticut for transfer or storage;

(K) The total weight in pounds of (i) untreated and (ii) decontaminated biomedical waste from all generators in Connecticut which the transporter delivered to a transporter outside of Connecticut or a solid waste facility outside of Connecticut;

(L) The total number of solid waste facilities, by state, to which the transporter delivered biomedical waste; and

(M) A statement, signed and dated by the transporter, which is identical to that set forth in subparagraph (9) (E) of this subsection.

(17) A transporter who initiates a tracking form pursuant to subdivision (h) (17) or (h) (18) of this section is subject to the requirements of subdivisions (10), (11), and (12) of this subsection, except that the 35- and 45-day periods referred to in such subdivisions begin on the day such transporter accepts the biomedical waste in question.

(18) The operator of a solid waste facility that accepts biomedical waste shall retain (A) records compiled pursuant to subdivision (19) of this section and (B) copies of tracking forms and letters retained pursuant to subdivisions (h) (20), (21), and (22) of this section for at least three years from the date such operator accepts the waste.

(19) The operator of a solid waste facility that accepts biomedical waste shall compile written records containing (A) the name and address of each small quantity generator who delivers biomedical waste to such facility pursuant to subdivision (g) (2) of this section, (B) the date each waste shipment pursuant to such subdivision was delivered, (C) the weight in pounds of each such shipment and (D) the signature of the solid waste facility employee who accepted each such shipment.

(20) The operator of a solid waste facility that accepts biomedical waste in accordance with subparagraph (h) (21) (A) of this section shall retain his copy of the signed and dated shipping paper for three years from the date he accepts the waste.

(See Appendix I on following page.)

APPENDIX I

MEDICAL WASTE TRACKING FORM

GENERATOR

1. Generator's Name and Mailing Address
2. Tracking Form Number
3. Telephone Number ( )
4. State Permit or ID No.
5. Transporter's Name and Mailing Address
6. Telephone Number ( )
7. State Transporter Permit or ID No.
EPA Med. Waste ID No.
8. Destination Facility Name and Address
9. Telephone Number ( )
10. State Permit or ID No.
11. US EPA Waste Description
12. Total No. Containers
13. Total Weight or Volume
a. Regulated Medical Waste (Untreated)
b. Regulated Medical Waste (Treated)
c. State Regulated Medical Waste
14. Special Handling Instructions and Additional Information
15. Generator's Certification:
Under penalty of criminal and civil prosecution for the making or submission of false statements, representations or omissions, I declare, on behalf of the generator
that the contents of the consignment are fully and accurately described above and are classified, packaged, marked, and labeled in accordance with all applicable State and Federal laws and regulations, and that I have been authorized, in writing, to make such declarations by the person in charge of the generator's operation
Printed/Typed Name Signature Date

INSTRUCTIONS

INSTRUCTIONS FOR COMPLETING MEDICAL WASTE TRACKING FORM

Copy 1 — GENERATOR COPY: Mailed by Destination Facility to Generator
Copy 2 — DESTINATION FACILITY COPY: Retained by Destination Facility
Copy 3 — TRANSPORTER COPY: Retained by Transporter
Copy 4 — GENERATOR COPY: Retained by Generator
As required under 40 CFR Part 259:
1. This multicopy (4-page) shipping document must accompany each shipment of regulated medical waste generated in a Covered State.
2. Items numbered 1-14 must be completed before the generator can sign the certification. Items 4, 7, 10, 11c, & 19 are optional unless required by the State. Item 22 must be completed by the destination facility.
For assistance in completing this form, contact your nearest State office or Regional EPA office, or call (800) 424-9346.

TRANSPORTER

16. Transporter 1 (Certification of Receipt of Medical Waste as described in items 11, 12, & 13)
Printed/Typed Name Signature Date
17. Transporter 2 or Intermediate Handler (name and address)
18. Telephone Number ( )
EPA Med. Waste ID No.
19. State Transporter Permit or ID No.
20. Transporter 2 or Intermediate Handler (Certification of Receipt of Medical Waste as described in items 11, 12, & 13)
Printed/Typed Name Signature Date
21. New Tracking Form Number (for consolidated or remanifested waste)

DESTINATION

22. Destination Facility (Certification of Receipt of Medical Waste as described in items 11, 12, & 13)
☐ Received in accordance with items 11, 12, & 13
Printed/Typed Name Signature Date
(If other than destination facility, indicate address, phone, and permit or ID no. in box 14.)
23. Discrepancy Box (Any discrepancies should be noted by item number and initials)

This appendix describes each section (box) of the biomedical waste tracking form and provides mandatory instructions for completing each of these sections. The generator shall complete Boxes 1–15, the transporter shall complete Boxes 16–21, and the operator of the solid waste facility shall complete Boxes 22–23. The transporter may assist the generator in completing any of the boxes, but the generator

is responsible for ensuring the accuracy of information entered on the form and must sign Box 15 after Boxes 1–14 are completed.

Box 1. Generator's Name and Mailing Address. Enter the name and mailing address of the generator. The mailing address shall be the address to which the solid waste facility will return the signed copy of the tracking form, and should be for the location where the generator's tracking forms will be handled for purposes of recordkeeping and exception reporting (e.g., the company's billing office, corporate headquarters, or the actual site of generation).

While the address entered here need not identify the particular site of generation, the generator shall maintain his records so that individual waste shipments (identified by a unique tracking form number assigned by the generator, discussed next) can be associated with the actual sites of generation.

Box 2. Tracking Form Number. This is the unique number that the generator shall assign to each shipment of biomedical waste. It will ensure that each individual shipment can be identified and independently tracked from the site of generation. (The number may be the date of shipment or some other notation that the generator wishes to utilize.)

Box 3. Generator Telephone Number. Enter the telephone number of a contact person for the generator who can provide additional information about the shipment in the event of an emergency or in the event that the transporter or solid waste facility requires it for other reasons (e.g., to inform the generator that an alternative waste disposal facility must be used).

Box 4. State Generator Permit or ID Number. This box is not applicable under current state law and should be left blank.

Box 5. Transporter's Name, Mailing Address and U.S. Environmental Protection Agency (''EPA'') Medical Waste Identification Number. Indicate in this space the name and address of the transporter who will be the first transporter of the biomedical waste which is the subject of the tracking form. The address shall be the business mailing address of the transporter. The transporter shall fill in his EPA Medical Waste Identification Number for the State in which the waste was generated. If a number has not yet been assigned, the transporter shall leave this box blank. The EPA Medical Waste Identification Number is assigned by EPA when the transporter notifies EPA.

Box 6. Transporter Telephone Number. Enter the telephone number of the transporter that the generator or solid waste facility operator may call to obtain information regarding a biomedical waste shipment.

Box 7. State Transporter Permit or ID Number. Enter the biomedical waste transporter permit number issued to transporter pursuant to subsection (g) of this section.

Box 8. Solid Waste Facility Name and Address. Enter the name and site address of the solid waste facility to which the biomedical waste is to be delivered. The site address is necessary to inform the transporter where the waste must be delivered. (If the generator does not have this information, the transporter may complete this section, but only before the generator signs the form. Transfer stations and other temporary storage facilities used by transporters for storage of waste during transport shall not be listed here as the solid waste facility.)

Box 9. Solid Waste Facility Telephone Number. Enter the solid waste facility's telephone number which a generator or transporter may call to obtain information regarding a biomedical waste shipment.

Box 10. State Solid Waste Facility Permit or ID Number. Enter the solid waste facility permit number assigned by Department of Environmental Protection pursuant

to Section 22a-208a of the General Statutes. If the solid waste facility is located outside Connecticut, enter the facility permit or other identification number assigned by the State in which the facility is located.

Box 11. U.S. Environmental Protection Agency Waste Description. In Box 11 (A), indicate untreated biomedical waste. In Box 11 (B), indicate decontaminated biomedical waste. In Box 11 (C), indicate chemotherapy waste. The generator shall determine and indicate the type(s) of his waste before completing Boxes 12 and 13.

Box 12. Total Number of Containers. Enter the total number of containers (e.g., bags, boxes, pails, drums, etc.) for each applicable waste type in the corresponding space.

Box 13. Total Weight or Volume. Enter the total weight of the waste, by applicable waste type, in the corresponding space. If the waste is oversized and is not packaged in a standard container, a volumetric measure may be used; however, the unit of measure shall be noted in that space as well.

Box 14. Special Handling Instructions and Additional Information. Generators may use this space to indicate special transportation, treatment, storage, or disposal information or bill of lading information, including alternative treatment and/or disposal facility information, if necessary. Generators may also include in this box a written request for the solid waste facility to certify disposal of the waste through signature and dating within this box. (Note: The signature in the solid waste facility Certification Box (Box 22) is only to be used to acknowledge receipt of the waste at the time of delivery to the facility.)

For out-of-State shipments, generators shall enter in this space the point of departure (city and State) for those wastes destined for facilities outside of Connecticut. This space may also be used if there is need to identify a third transporter.

This space should also be used to provide special instructions or additional information regarding oversized biomedical waste that cannot be easily packaged in plastic bags or standard containers. In these instances, enter a description of the waste, including whether the waste is untreated or decontaminated, the number of pieces, and the approximate total weight.

Box 15. Generator's Certification. This statement, when signed by the generator, certifies that (i) all information required to be provided by that generator is accurate (including any information provided by the transporter in Boxes 1–14), (ii) all wastes indicated on the tracking form are properly prepared for transport, and (iii) all applicable State and Federal requirements have been met. The generator shall enter his name into this statement and read it, sign it by hand, and date it. The individual signing the statement must be authorized in writing to make the required declarations by the generator.

Box 16. Transporter 1 Certification of Receipt. The first transporter shall acknowledge acceptance of a biomedical waste shipment from the generator by signing the form in this box and recording the date of acceptance. Before doing so, a transporter shall indicate in Box 23 of the tracking form any circumstances of the type described in subparagraph (h) (20) (A) of this section. In those instances when a transporter initiates a tracking form, he shall complete Boxes 1–15 and if he is also the first transporter as identified in Box 5 (Transporter's Name and Mailing Address), he shall acknowledge receipt as transporter 1.

Box 17. Transporter 2 Name, Address, and U.S. Environmental Protection Agency Medical Waste Identification Number. In the event the waste shipment is to be transported by a second transporter, such second transporter shall enter in this box his name and business mailing address and his U.S. Environmental Protection Agency Medical Waste Identification Number if it is available.

Box 18. Transporter 2 Telephone Number. Enter the second transporter's telephone number to be used when checking or investigating the status of a shipment.

Box 19. Transporter 2 State Transporter Permit or ID Number. In this box, a second transporter shall enter his biomedical waste transporter permit number assigned under subsection (g) of this section, or, if such second transporter is an out-of-state transporter, he shall enter any permit or other identification number assigned to him by such other state.

Box 20. Transporter 2 or Intermediate Handler Certification of Receipt. A second transporter shall acknowledge acceptance of the waste shipment by entering his name and the date of acceptance and signing the form. Before doing so, he shall indicate in Box 23 of the tracking form any circumstances of the type described in subparagraph (h) (20) (A) of this section.

Box 21. New Tracking Form Number. If a biomedical waste transporter consolidates multiple biomedical shipments on a new tracking form, a new tracking form number shall be recorded in this box on the original generator's form.

Box 22. Solid Waste Facility. The operator of a solid waste facility shall acknowledge acceptance of biomedical waste by printing or typing his name and date of acceptance and signing in this box. Before doing so, he shall complete Box 23, as applicable, or, if there is nothing to record in Box 23, he shall place a check next to the statement ''received in accordance with items 11, 12 and thirteen.''

If biomedical waste is delivered to a solid waste facility other than that indicated in Box 8, the operator of the solid waste facility that accepted the waste shall complete Box 22 in the manner described in the foregoing paragraph and shall type or print his address, telephone number, and permit number assigned pursuant to Section 22a-208a of the General Statutes.

Box 23. Discrepancy Box. In Box 23 the operator of the solid waste facility shall indicate any circumstances of the type described in subparagraph (h) (20) (A) of this section. (Note: In some instances, due to the consolidation provisions of subdivisions (h) (18) and (19) of this section, transporters may also need to complete this box.)

(Effective March 21, 1990)

Sec. 22a-209-16. Fees for transfer of a permit to construct or a permit to operate a solid waste facility

(a) **Authority.** This section is adopted under the authority of subdivision (a) (10) of Section 22a-6 of the General Statutes and Section 22a-208a of the General Statutes.

(b) **Transfer fee.**

(1) The fee for transfer of a permit to construct or operate a solid waste facility shall be $500.00. The fee shall be submitted simultaneously with the request for transfer, and the permit shall not be transferred prior to payment of the fee and approval of the transfer by the Commissioner, as required by Section 22a-209-4 of the Regulations of Connecticut State Agencies. The fee provided in this section shall be non-refundable.

(2) Within thirty (30) days after issuance of notice from the Commissioner that the actual cost of reviewing and acting on a request has substantially exceeded the amount of the fee as specified in this section, the applicant shall submit the difference between the fee which it has paid and the actual costs to the Commissioner.

(3) The transfer fee shall be paid by certified check or money order payable to the Department of Environmental Protection. The certified check or money order shall state on its face, ''Solid Waste Transfer Fee.''

(Effective July 13, 1993)

Sec. 22a-209-17. Mercury-containing lamps

(a) **Applicability**

Notwithstanding any other provision of sections 22a-209-1 to 22a-209-16, inclusive, of the regulations of Connecticut State Agencies, mercury-containing lamps, as defined in section 22a-209-17(b) of the regulations of Connecticut State Agencies, shall be subject to regulation under this section. Mercury-containing lamps that are subject to regulation under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies are not subject to regulation under this section, but remain subject to regulation under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies.

(b) **Definitions.** When used in section 22a-209-17 of the Regulations of Connecticut State Agencies, including the provisions of the Code of Federal Regulations which are incorporated by reference in this section:

(1) ''Administrator'' and ''Regional Administrator'' means the Commissioner of Environmental Protection, or the commissioner's designee.

(2) ''CFR'' or ''Code of Federal Regulations'' in reference to all or any portion of 40 CFR 273, Standards for Managing Universal Waste, means the Code of Federal Regulations revised as of July 1, 2000.

(3) ''EPA'', ''U.S. Environmental Protection Agency'', ''EPA region'', ''EPA regional office'', and ''Regional EPA office'' means the Connecticut Department of Environmental Protection, except that ''EPA'' when used in the terms ''EPA identification numbers,'' ''EPA test methods,'' ''EPA publications,'' and ''EPA forms,'' means the U.S. Environmental Protection Agency.

(4) ''Lamp'', ''lamps'', ''lamp as described in section 273.9'' or ''universal waste lamp'' as used in 40 CFR 273, means ''mercury-containing lamp'' as defined in section 22a-209-17(b) of the Regulations of Connecticut State Agencies, except when section 22a-209-17 of the Regulations of Connecticut State Agencies specifies otherwise.

(5) ''Mercury-Containing Lamp'' means the bulb or tube portion of an electric lighting device that contains mercury in any amount. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of mercury containing lamps include, but are not limited to, fluorescent, high intensity discharge, neon, high pressure sodium, mercury vapor and metal halide lamps. The term ''mercury-containing lamp'' does not include lamps that are subject to regulation under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies.

(c) **Management Standards**

(1) The provisions of 40 CFR 273, applicable to lamps, are hereby incorporated by reference in their entirety, except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated.

(A) 40 CFR 273.5 (b)(2) (which relates to an exemption for lamps that are not hazardous); and

(B) 40 CFR 273, Subpart G (which relates to petitions for universal wastes).

(2) The following provisions of this subdivision applicable to lamps are incorporated by reference with the specified changes:

(A) 40 CFR 273.5(b)(1)

— delete ''under part 261 of this chapter''

(B) 40 CFR 273.9

— in the definition of generator, delete ''hazardous waste identified or listed in part 261 of this chapter or whose act first causes a hazardous waste'' and replace with ''or whose act first causes a mercury-containing lamp''

— in the definition of ''Large Quantity Handler'' and ''Small Quantity Handler'' the term ''lamp'' shall include lamps subject to regulation under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies and ''mercury-containing lamps'' subject to regulation under section 22a-209-17(b) of the Regulations of Connecticut State Agencies

(C) 40 CFR 273.13(d)(1)

— delete ''lack of evidence'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(D) 40 CFR 273.13(d)(2)

— delete ''that could cause the release of mercury or other hazardous constituents to the environment''

— delete ''lack of evidence'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(E) 40 CFR 273.18(h)

— delete ''may'' and replace with ''shall''

— delete ''any way that is in''

(F) 40 CFR 273.32 (b) (4) and (5)

— the term ''lamp'' shall include lamps subject to regulation under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies and ''mercury-containing lamps'' subject to regulation under section 22a-209-17(b) of the Regulations of Connecticut State Agencies

(G) 40 CFR 273.33(d)(1)

— delete ''lack evidence of'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(H) 40 CFR 273.33(d)(2)

— delete ''that could cause the release of mercury or other hazardous constituents to the environment''

— delete ''lack evidence of'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(I) 40 CFR 273.38(h)

— delete ''may'' and replace with ''shall''

— delete ''any way that it is in''

(J) 40 CFR 273.60(a)

— at the beginning of the paragraph insert ''In addition to all applicable provisions of the Connecticut General Statutes, including but not limited to, section 22a-209e of the Connecticut General Statutes,''

— when any part of the Code of Federal Regulations cited in 40 CFR 273.60(a) (e.g., 40 CFR 264, 265, 266, 268, 270 and 124) makes reference to the term ''hazardous waste,'' such reference shall mean ''mercury-containing lamp'' as that term is defined in section 22a-209-17(b) of the Regulations of Connecticut State Agencies. In addition, notwithstanding any reference in 40 CFR 273.60(a), any permit issued to a destination facility under this section, (e.g., a permit for the treatment, disposal or recycling of a mercury-containing lamp as that term is defined in section 22a-209-17(b) of the Regulations of Connecticut State Agencies) shall be issued using the procedures applicable to solid waste facilities, not hazardous waste facilities.

— at the end of this paragraph, delete '':'' and replace with ''.''

(K) 40 CFR 273.61(d)

— delete ‘‘may’’ and replace with ‘‘shall’’
— delete ‘‘any way that it is in’’
(Adopted effective October 31, 2001; amended June 27, 2002)

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State Solid Waste Management Plan

Sec. 22a-228-1. Procedures for adopting and amending a statewide solid waste management plan and for granting temporary variances

(a) **Plan adoption.**

(1) The Commissioner of Environmental Protection shall prepare a statewide solid waste management plan in accordance with Public Act 85-436. He or she shall hold regional public hearings on a proposed plan and shall give at least thirty days notice of each hearing by publication in the Connecticut Law Journal. Notice of such hearing may be published in one or more newspapers having general circulation in each municipality as deemed necessary by the Commissioner. The notice shall state the date, time and place of the hearing, the subject matter of the hearing, the statutory authority for the plan, and the location where a copy of the plan may be examined.

(2) At least thirty days prior to the first hearing, the Commissioner shall send a copy of the proposed plan by certified mail, return receipt requested to the Connecticut Solid Waste Management Advisory Council, the Connecticut Resources Recovery Authority and the chief executive officer of each municipality.

(3) Any person or municipality may comment on the proposed plan. The Commissioner shall provide a time period of not less than forty-five days from the date the notice is published in the Connecticut Law Journal for review and comment. The Commissioner shall consider fully, after all public hearings, all written and oral comments respecting the proposed plan and shall mail to each person or municipality who commented or requested notification, notice of availability of the following documents at a designated location: the text of the final plan; a summary of the differences between the proposed and final plan and the reasons therefore; and the principal considerations raised in opposition to the proposed plan and the reasons for rejecting any such considerations. The Commissioner shall sign the final plan. The final plan shall take effect immediately upon signing by the Commissioner or such other time as he or she designates. The Commissioner shall send a copy of the final plan, by certified mail, return receipt requested, to the Connecticut Solid Waste Management Advisory Council, the Connecticut Resources Recovery Authority and the chief executive officer of each municipality.

(b) **Plan amendment.**

(1) The Commissioner may prepare, on his or her initiative or upon request of any municipality, an amendment to the statewide solid waste management plan adopted pursuant to Public Act 85-436 and subsection (a) of this section or amended pursuant to this subsection.

(2) Any municipality may, by vote of its legislative body, as defined by Section 1-1 (m) of the General Statutes, apply to the Commissioner for an amendment to the plan. The municipality shall submit such request to the Commissioner on forms provided by him or her and shall include such information as the Commissioner deems necessary, including but not limited to:

(A) a description of the proposed amendment;

(B) the reasons for the proposed amendment, including supporting documentation;

(C) a detailed statement of the proposed amendment's effect on the plan adopted pursuant to Public Act 85-436 and subsection (a) of this section or amended pursuant to this subsection;

(D) the identification of the municipalities affected by the proposed amendment and evidence in writing, whenever possible, of the opinion of the municipal legisla-

tive body, as defined by Section 1-1 (m) of the General Statutes, of any municipality affected by the proposed amendment;

(E) the identification of any affected solid waste facility; and

(F) other information deemed necessary by the Commissioner.

(3) The Commissioner may deny a request for an amendment and in doing so he or she shall forward to the municipality making the request a detailed statement of the reason(s). A copy shall be forwarded to the legislative body of each municipality affected by the proposed amendment as identified in subparagraph (b) (2) (D) of this section and each solid waste facility identified in subparagraph (b) (2) (E) of this section.

(4) If, in the Commissioner's judgment, a hearing on the proposed amendment would be in the public interest, the Commissioner shall schedule a hearing and at least ten working days prior to the hearing:

(A) send notice of the date, time and place of such hearing, by certified mail, return receipt requested, to the Connecticut Solid Waste Management Advisory Council, the Connecticut Resources Recovery Authority, the chief executive officer and municipal legislative body of each affected municipality as identified in subparagraph (b) (2) (D) of this section or identified in subparagraph (c) (1) (D) of this section and the owner or operator of each affected solid waste facility as identified in subparagraph (b) (2) (E) of this section or identified in subparagraph (c) (1) (E) of this section; and

(B) publish notice of the hearing in the Connecticut Law Journal, and as deemed necessary by the Commissioner, in one or more newspapers of general circulation in each affected municipality. Such notice shall include, but not be limited to: the date, time and place of the public hearing; the text or a summary of the proposed amendment and the principal reasons therefore; the location where the text and requests for amendment may be examined, if not included in the notice.

Any person or municipality may comment on the proposed amendment. The Commissioner shall provide a time period of not less than thirty days from the date the notice is published in the Connecticut Law Journal for review and comment and shall consider fully all written and oral comments respecting the proposed amendment.

(5) If the Commissioner does not intend to hold a public hearing on his or her own initiative, he or she shall give notice of the proposed amendment in the manner specified in subdivision (b) (4) of this section. Such notice shall include, but not be limited to: the text or a summary of the proposed amendment and the reasons therefore; the location where the text may be examined if not included in the notice; a statement that the Commissioner will hold a public hearing upon the written request of the chief executive officer or legislative body of any affected municipality, the owner or operator of an affected solid waste facility or twenty-five persons, provided notice of such request is received within ten working days from the date of publication or receipt of the mailed notice, whichever is later.

(6) If the Commissioner receives a request for a hearing pursuant to subdivision (b) (5) of this section, he or she shall schedule a hearing and give notice of the proposed amendment in the manner specified in subdivision (b) (4) of this section. Such notice shall be sent to each person or municipality who requested a hearing or notification thereof.

(7) The Commissioner shall send notice of his or her decision on a proposed amendment by certified mail, return receipt requested, following the hearing to each person or municipality who submitted comments on the proposed amendment and

each person or municipality who requested notice. The notice shall include, but not be limited to: the reasons for denial or the text or a summary of the final amendment; the location where the text may be examined if not included in the notice; a summary of how the final amendment differs from that proposed and the reasons therefore; and the principal considerations raised in opposition to the proposed amendment and the reasons for rejecting any such considerations.

(8) The Commissioner shall sign the amendment and send a copy by certified mail, return receipt requested, to the Connecticut Solid Waste Management Advisory Council, the Connecticut Resources Recovery Authority and the chief executive officer of each affected municipality. The amendment shall take effect immediately upon signing by the Commissioner or such other time as he or she designates.

(9) Two years after the adoption of the plan pursuant to Public Act 85-436 and subsection (a) of this section and thereafter at intervals of two years, the Commissioner shall incorporate all amendments to the plan, adopted pursuant to this subsection, in the text thereof. The Commissioner shall sign said plan which shall be effective immediately upon his or her signing or such other time as the Commissioner designates. The Commissioner shall send such copy of the plan, by certified mail, return receipt requested, to the chief executive officer of each municipality, the Connecticut Solid Waste Management Advisory Council and the Connecticut Resources Recovery Authority.

(c) **Temporary variances.**

(1) Any municipality may apply to the Commissioner for a variance from one or more provisions of the plan adopted pursuant to Public Act 85-436 and subsection (a) of this section or amended pursuant to subsection (b) of this section. The Commissioner may require a vote by the municipal legislative body, as defined by Section 1-1 (m) of the General Statutes. The municipality requesting a variance shall submit such request to the Commissioner on forms furnished or prescribed by him or her and shall supply such information as the Commissioner necessary, including but not limited to:

(A) the reasons for which the proposed variance is requested;

(B) a specific schedule of measures to be taken to bring the activity for which a proposed variance is being requested into compliance with the plan;

(C) the period for which the proposed variance is sought, and the justification for such time period;

(D) the identification of the municipalities affected by the proposed variance and evidence in writing, whenever possible, of the opinion of the municipal legislative body, as defined by Section 1-1 (m) of the General Statutes, of any municipality affected by the request;

(E) the identification of any affected solid waste facility; and

(F) any other information deemed necessary by the Commissioner.

(2) The Commissioner may deny a request for a variance and in doing so he or she shall forward to the municipality making the request a detailed statement of the reason(s). A copy shall be forwarded to the legislative body of each municipality affected by the proposed variance as identified in subparagraph (c) (1) (D) of this section and each solid waste facility identified in subparagraph (c) (1) (E) of this section.

(3) If, in the Commissioner's judgment, a hearing on the proposed variance or extension pursuant to subdivision (c) (7) of this section, would be in the public interest, he or she shall follow the requirements set forth in subdivision (b) (4) of this section with the exception of notice publication in the Connecticut Law Journal.

The Commissioner may establish time periods different than those of subdivision (b) (4) of this section, as he or she deems necessary.

(4) If the Commissioner does not intend to hold a public hearing on his or her own initiative, he or she shall follow the requirements set forth in subdivision (b) (5) of this section with the exception of notice publication in the Connecticut Law Journal. The Commissioner may establish time periods different than those of subdivision (b) (4) of this section, as he or she deems necessary.

(5) In making a determination regarding a variance, the Commissioner shall consider:

(A) the character and degree of injury to or interference with the reasonable use of property, the public health and safety, and the natural resources and environment of the State which is caused or threatened to be caused by the variance.

(B) the affect on the plan adopted pursuant to Public Act 85-436 and subsection (a) of this section or amended pursuant to subsection (b) of this section.

(C) the impracticability, both technological and economic, to comply with the plan.

(6) In acting on a request for a variance, the Commissioner shall balance the degree to which compliance with the plan or portion of the plan in question would create an undue hardship for the municipality making the request, against the benefit to the environment, the public, any affected municipality and any affected solid waste facility from the municipality's conformance with the plan or portion thereof.

(7) The Commissioner shall specify in writing the period for which a variance shall be valid, not to exceed one year. A municipality may apply for a variance extension no later than ninety days prior to the variance's termination date. The Commissioner, for good cause shown, may grant a request for an extension not made within the prescribed time.

(8) The Commissioner shall sign each variance and extension and send a copy, by certified mail, return receipt requested, to the Connecticut Solid Waste Management Advisory Council, the Connecticut Resources Recovery Authority and the chief executive officer of each affected municipality. The variance shall take effect immediately upon signing by the Commissioner or such other time as he or she designates.

(9) The Commissioner may revoke or suspend a variance in accordance with Section 4-182 of the General Statutes and Section 22a-3a-1 of the Regulations of Connecticut State Agencies, as amended.

(Effective September 19, 1986)

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Qualifications of Operators and Inspectors of Resources Recovery Facilities

Qualifications of operators of resources recovery facilities 22a-231- 1

Qualifications of Operators and Inspectors of Resources Recovery Facilities

Sec. 22a-231-1. Qualifications of operators of resources recovery facilities

(a) **Definitions.**

''Certificate'' means certificate of competency issued by the Commissioner stating that the operator has met the requirements for the specified operator classification of the certification program.

''Chief operator'' means an individual who is in direct charge of the operation of a resources recovery facility and who is responsible for on-site, overall supervision, technical direction, management and performance of the facility.

''Owner'' means the person in possession of or having legal ownership of the resources recovery facility.

''Permitted capacity'' means the capacity of a resources recovery facility permitted pursuant to section 22a-208 of the General Statutes.

''Person'' means any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency or political or administrative subdivision of the state, or administrative subdivision of the state, or other legal entity of any kind.

''Resources recovery facility'' means a facility utilizing processes aimed at reclaiming the material or energy values from municipal solid wastes: A Type 1 resources recovery facility is a facility permitted pursuant to section 22a-208 of the General Statutes which reduces the volume of solid waste by material reclamation; a Type 2 resources recovery facility is a facility permitted pursuant to section 22a-208 of the General Statutes which reduces the volume of solid waste by energy value reclamation; and a Type 3 resources recovery facility is a facility permitted pursuant to section 22a-208 of the General Statutes which reduces the volume of solid waste by both material and energy value reclamation.

''Shift operator'' means the individual who is in direct charge of the operation of a shift of a resources recovery facility and who is responsible for on-site supervision, technical direction, management, and overall performance of the facility during a shift.

(b) **Applicability.**

(1) The owner and operators of Type 1 resources recovery facilities shall be subject to the requirements of subsections 22a-209-6 (a), (b) and (c), inclusive, of the Regulations of Connecticut State Agencies and the owner and chief and shift operators of Type 2 resources recovery facilities shall be subject to this section. For a Type 3 resources recovery facility the owner and operators of the materials reclamation operation shall be subject to the requirements of subsections (a), (b) and (c) of section 22a-209-6 of the Regulations of Connecticut State Agencies and the owner and chief and shift operators of the energy value reclamation operation shall be subject to this section.

(2) Any operator certified pursuant to subsections (a), (b) and (c) of section 22a-209-6 of the Regulations of Connecticut State Agencies for a Type 2 resources recovery facility or an operation which reduces the volume of solid waste by energy reclamation shall be subject to this section and shall apply for certification within ten days of the effective date of this section. Certification pursuant to subsection 22a-209-6 (b) shall be valid for no more than ninety days following the effective date of this section. Failure to apply shall cause forfeiture of certification pursuant to subdivision (4) of subsection 22a-209-6 (b).

(c) **General Policies.**

(1) Each owner of a Type 2 or the energy value reclamation operation of a Type 3 resources recovery facility permitted pursuant to section 22a-208 of the General Statutes shall employ a chief operator who shall possess a certificate which qualifies him or her to operate a facility of that class, and who shall be on-site for supervision for a minimum of 65% of the normal work year, and who shall be directly responsible for the operation of the facility. Where shift operation of a facility occurs, each shift shall have the on-site supervision of a shift operator who is certified for the operation of a facility of that class. For no more than ninety days following the effective date of this section, such operation or facility may operate with individuals certified under subsection 22a-209-6 (b) provided that each shift has on-site supervision of a certified operator 100% of the time.

(2) Operators with a particular class certificate are qualified to operate all resources recovery facilities in that particular class and any lower class.

(3) The owner of a resources recovery facility must file the name of each certified chief and certified shift operator with the Commissioner. The owner may replace any certified chief or certified shift operator with another properly certified individual at any time and shall notify the Commissioner in writing within ten days of the replacement.

(4) In the event that a resources recovery facility loses services of or terminates its certified chief operator, the owner must notify the Commissioner immediately. The facility may continue to operate without a certified chief operator for a maximum of ninety days. For good cause shown, the Commissioner may allow the facility to operate without a chief operator for a stated period beyond the ninety day period.

(5) Where shift operation of a resources recovery facility is required, each shift which does not have the on-site supervision of the certified chief operator shall have the on-site supervision of a certified shift operator. During operation a resources recovery facility shall have the on-site supervision of a certified operator 100% of the time.

(d) **Classification of resources recovery facilities.**

The Commissioner shall classify a Type 2 resources recovery facility and the energy value reclamation operation of a Type 3 resources recovery facility according to the following:

(1) a Class 1 facility is a facility with a permitted capacity of more than 600 tons per day; and

(2) a Class 2 facility is a facility with a permitted capacity of equal to or less than 600 tons per day.

(e) **Qualifications of resources recovery facility operators.**

(1) There shall be two classes of operators consistent with the classification of resources recovery facilities described in subsection (d) of this section.

(2) Applicants in the two classifications shall meet the following general requirements:

(A) be in satisfactory physical condition to the extent deemed necessary by the Commissioner in order to perform the duties of a certified chief or certified shift operator;

(B) be able to communicate both orally and in writing to the extent deemed necessary by the Commissioner in order to perform the duties of a certified chief or certified shift operator;

(C) produce evidence of satisfactory completion of educational requirements;

(D) be able to maintain necessary logs and records of operation and maintenance in a resources recovery facility of the class for which the application was made; and

(E) produce evidence satisfactory to the Commissioner of ability and experience in supervising workers and dealing with regulatory agencies and the public to a degree consistent with the requirements of the class for which the application was made.

(3) Requirements.

(A) Class I Chief Operator.

The qualifications of a Class I Chief Operator shall be education, training and practical experience consisting of at least four years of higher education in a field which the Commissioner determines is sufficiently related to the operation of a resources recovery facility and not less than two years of experience satisfactory to the Commissioner having responsibility for the on-site supervision of the operation of a Class I resources recovery facility.

(B) Class II Chief Operator.

The qualifications of a Class II Chief Operator shall be education, training and practical experience consisting of at least three years of higher education in a field which the Commissioner determines is sufficiently related to the operation of a resources recovery facility and not less than one year of experience satisfactory to the Commissioner having responsibility for the on-site supervision of the operation of a Class II resources recovery facility.

(C) Class I Shift Operator.

The qualifications of a Class I Shift Operator shall be education, training and practical experience consisting of a high school diploma or its equivalent and not less than two years of experience satisfactory to the Commissioner in the operation of a Class I resources recovery facility.

(D) Class II Shift Operator.

The qualifications of a Class II Shift Operator shall be education, training and practical experience consisting of a high school diploma or its equivalent and not less than one year of experience satisfactory to the Commissioner in the operation of a Class I or Class II resources recovery facility.

(4) Substitutions for formal education requirements.

Classes I and II Chief Operator qualifying substitution is one year of experience acceptable to the Commissioner having responsibility for the on-site supervision of a boiler plant operation with a capacity of at least 100,000 pounds of steam per hour at a minimum of 150 psig and at least 20 degrees F of superheat may be substituted for one year of higher education.

(5) Substitutions for experience requirements.

(A) Class I Chief Operator qualifying substitution is two years of related experience approved by the Commissioner can be substituted for one year experience in the on-site supervision of a Class I resources recovery facility;

(B) Class II Chief Operator qualifying substitution is two years of related experience approved by the Commissioner can be substituted for one year experience in the on-site supervision of a Class II resources recovery facility;

(C) Classes I and II Shift Operator qualifying substitution is two years of related experience approved by the Commissioner can be substituted for one year experience in the actual operation of a resources recovery facility;

(D) Experience applied in substitution for an education requirement cannot also be applied to the experience requirement.

(f) **Application for certification.**

(1) Any person desiring to be certified shall file an application on forms prescribed and provided by the Commissioner. The Commissioner shall acknowledge receipt of a complete application to the applicant within fourteen days by certified mail.

(2) The Commissioner shall review applications and supporting documents, determine the eligibility of the applicant and notify the applicant of his or her status in writing by certified mail within sixty days of acknowledgement of receipt of a complete application. When the applicant is not notified within sixty days, the applicant shall be considered denied unless otherwise notified by the Commissioner.

(3) Within twenty days of receipt of notification that an application has been denied or after sixty days from acknowledgement of a complete application without notification of status, the applicant may request a hearing, and such hearing shall be held if requested. The hearing shall be conducted in accordance with Chapter 54 of the General Statutes and section 22a-3a-1 of the Regulations of Connecticut State Agencies.

(g) **Examinations and instruction.**

(1) The Commissioner may require the successful completion of instruction or examination or both in solid waste management and related pollution controls to maintain certification. Instruction may consist of on-the-job or classroom instruction, or a combination of both and examination may be written or oral, or a combination of both.

(2) The Commissioner shall give at least thirty days prior notice of the date, time, place and subject matter of the instruction or examination.

(3) If necessary, separate instruction or examinations may be prepared to account for basic differences in the duties and responsibilities.

(h) **Issuance of cetificate.**

(1) Upon satisfactory fulfillment by an applicant of the requirements of this section, the Commissioner shall issue to the applicant a certificate designating his or her competency. The certificate shall indicate the class and type of resources recovery facility for which the operator is certified. The certificate shall be prominently displayed in the office of the facility.

(2) Valid certificates shall be subject to renewal every five years from the date of issuance. Any certified chief or shift operator employed as such less than three years in the first five years of certification or in any five year renewal period thereafter shall forfeit certification status.

(3) Certificates may be issued in a comparable classification to a person holding a current certificate issued by a jurisdiction other than the State of Connecticut if in the judgment of the Commissioner the requirements for certification of operators under which such person's certificate was issued are at least equivalent with the provisions of this section.

(4) Upon written request of the owner of a resources recovery facility, the Commissioner may issue a provisional certificate of proper classification to a person who is a chief operator or shift operator on the effective date of this section and who does not meet the minimum requirements of subsection (e). Such a provisional certificate shall be valid for no more than ninety days for the facility in which the operator was employed at the time the certificate was issued.

(i) **Revocation of certificate.**

The Commissioner may revoke the certificate of an operator when it is determined that the operator obtained a certificate through fraud, deceit or the submission of inaccurate data on qualifications; has practiced fraud or deception in the performance of his or her duties; that reasonable care, judgment or the application of his or her

knowledge or ability was not used in the performance of his or her duties. The Commissioner shall give prior written notice of revocation to the certified operator and the owner of the resources recovery facility setting forth the reasons for the Commissioner's proposed action. Within twenty days of receipt of notification the operator may request a hearing, and such hearing shall be held if requested. The hearing shall be conducted in accordance with Chapter 54 of the General Statutes and section 22a-3a-1 of the Regulations of Connecticut State Agencies.

(j) **Advisory committee.**

(1) The Commissioner shall appoint an advisory committee not exceeding nine persons: Three members shall be chief or shift operators; two shall be members of the staff of the Department of Environmental Protection whose regular duties involve solid waste facility operation; one shall be an educator familiar with operating training; and one shall be a designer of resources recovery facilities. Any other member shall be appointed at the discretion of the Commissioner. The lack of a fully constituted committee shall not invalidate any requirement or provision of this section.

(2) Each member of the committee, with the exception of the members from the Department, who shall serve at the discretion of the Commissioner, shall be appointed for a three year term, except in the case of the initial appointment. For the initial appointment, one of the operators shall be appointed for two years, one of the operators and the educator shall be appointed for one year. The individual members of the advisory committee, with the exception of the representatives of the Department of Environmental Protection, shall serve no more than two consecutive three year terms. The committee may adopt and amend by a majority vote such by-laws as it deems necessary to conduct its business.

(3) The advisory committee shall serve without compensation and shall meet at the discretion of the Commissioner.

(4) The committee shall advise and assist the Commissioner in administering the certification program in the following manner as requested:

(A) review the classification of the solid waste facilities;

(B) encourage other operators in addition to those required by virtue of their responsibilities as chief or shift operators to become certified;

(C) promote regular solid waste facilities operator training schools and programs;

(D) review and assist in the preparation of written or oral examinations;

(E) review revocations of certificates;

(F) review applicant qualifications.

(Effective March 23, 1988)

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Qualifications of inspectors of resources recovery facilities 22a-238- 1

Qualifications of Operators and Inspectors of Resources Recovery Facilities

Sec. 22a-238-1. Qualifications of inspectors of resources recovery facilities

(a) **Definitions.**

''Certificate'' means certificate of competency issued by the Commissioner stating that the inspector has met the requirements of the certification program.

''Certified inspector'' means the inspector appointed by any municipality where a resources recovery facility is located or any group of municipalities participating in a resources recovery facility whose qualifications are approved in accordance with this section.

''Resources recovery facility'' means a facility utilizing processes aimed at reclaiming the material or energy values from municipal solid wastes.

(b) **Application.**

Any individual desiring to be certified shall file an application with the Commissioner with the consent of the chief executive officer of the municipality where a resources recovery facility is located or each of the chief executive officers of a group of municipalities participating in a resources recovery facility. Such applicant shall be an employee of one or more of said municipalities. The application shall be submitted on forms provided by the Commissioner and shall include but not be limited to the following:

(1) the name of the applicant and his or her address and phone number during normal business hours and in the event of an emergency;

(2) the experience, education and training of the applicant related to the duties of an inspector of resources recovery facilities;

(3) the signature of the applicant and the chief executive officer or chief executive officers appointing said applicant; and

(4) any additional information which the Commissioner deems necessary.

(c) **Qualifications of resources recovery facility inspectors.**

(1) Applicants shall meet the following education, training and practical experience:

(A) knowledge of methods and procedures of carrying out investigations on causes and control of air pollution;

(B) knowledge of methods and procedures of carrying out investigations on causes and control of water pollution;

(C) knowledge of proper hazardous materials and waste management practices;

(D) knowledge of proper solid waste disposal and management practices;

(E) skill in performing surveillance, inspection and investigation activities;

(F) ability to read and interpret statutes, regulations and policies concerning management of resources recovery facilities;

(G) ability to interpret written or statistical data;

(H) four years of experience in at least one of the following fields: air pollution control, water pollution control, hazardous waste management, solid waste management or any combinations thereof. College training in a related field may be substituted for experience on the basis of thirty semester hours equal to one year to a maximum of four years;

(2) The department shall evaluate an applicant's qualifications by one of the following methods:

(A) a written examination;

(B) an oral examination; or

(C) a review of the information contained on the application showing the applicant's experience and training.

If the department needs to clarify information provided on the application an interview shall be scheduled with the applicant. The Commissioner shall give at least thirty days prior notice of the date, time, place and, if applicable, the subject matter of the examination of interview.

(3) If an application has been denied, the applicant may require a hearing and such hearing shall be held if required. The hearing shall be conducted in accordance with Chapter 54 and Section 22a-3a-1 of the Regulations of Connecticut State Agencies.

(d) **Issuance and maintenance of certificate.**

(1) Upon satisfactory fulfillment by the applicant of the requirements of this subsection, the Commissioner shall issue to the applicant a certificate designating his or her competency. Evidence of such certification shall be available at the time of any surveillance, inspection or investigation of a resources recovery facility.

(2) All applicants shall be required to complete to the satisfaction of the Commissioner an initial training course and subsequent courses thereafter to maintain certification.

(3) Valid certificates shall be subject to renewal every five years from the date of issuance.

(4) The Commissioner shall give at least thirty days prior notice of the date, time, place and subject matter of the instruction.

(e) **Revocation of certificate.**

The Commissioner may revoke the certificate of an inspector when it is determined that the inspector obtained a certificate through fraud, deceit or the submission of inaccurate data on qualifications; has practiced fraud or deception in the performance of his or her duties; that reasonable care, judgement or the application of his or her knowledge or ability was not used in the performance of his or her duties; or that the inspector is incompetent or unable properly to perform his or her duties or has not successfully completed training courses as may be required by the successfully completed training courses as may be required by the Commissioner. The Commissioner shall give prior written notice of revocation to the certified inspector and the chief executive officer or officers employing said inspector setting forth the reasons for the proposed action. Within twenty days of receipt of notification the inspector may request a hearing, and such hearing shall be held if requested. The hearing shall be conducted in accordance with Chapter 54 of the General Statutes and section 22a-3a-1 of the Regulations of Connecticut State Agencies.

(f) **Termination.**

The appointing authority may relinquish certification of a certified inspector by written notice to the Commissioner. Such termination shall take place immediately.

(Effective March 23, 1988)

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Designated Recycling

Sec. 22a-241b-1. Definitions

(1) ''Boxboard'' means a lightweight paperboard made from a variety of recovered fibers having sufficient folding properties and thickness to be used to manufacture folding or set-up boxes such as cereal boxes and shoe boxes. As used in this section, ''Boxboard'' does not include paperboard that has been treated with a wax or laminate coating nor any removable plastic liners.

(2) ''Cardboard'' means corrugated boxes and similar corrugated and kraft paper materials which have a minimum of contamination by food or other material.

(3) ''Colored ledger paper'' means uncoated, printed or unprinted colored groundwood-free ledger, bond, writing, and other paper which has similar fiber and filler content.

(4) ''Glass food container'' means a glass bottle or jar of any size or shape used to package food products suitable for human or animal consumption.

(5) ''High density polyethylene container'' or ''HDPE container'' means a plastic container that, exclusive of closure or label, is composed of high density polyethylene with a density of 0.94 grams per cubic centimeter or greater, and has an ASTM Resin Identification Number of 2 as defined in ASTM D7611 Standard Practice for Coding Plastic Manufactured Articles for Resin Identification. As used in this section, ''High density polyethylene container'' does not include containers which contained motor oil, pesticides, herbicides or other hazardous substances.

(6) ''Intermediate processing center'' means a facility which can recycle an item or items and market or deliver for reuse the resulting material product or products. Such facilities may be owned by public or private entities or combinations thereof and may offer service on a state, regional, municipal, or submunicipal level.

(7) ''Leaves'' means the foliage of trees.

(8) ''Local processing system'' means a facility or technique authorized by a municipality and acceptable to the commissioner which can recycle an item or items and market or deliver for reuse the resulting material product or products.

(9) ''Magazines'' means coated periodicals, catalogues, and similar printed materials which may contain a small percentage of uncoated newstype paper.

(10) ''Market'' means to sell or deliver a recyclable item to a consumer who will reuse it or dispose of it for reuse in a material product.

(11) ''Metal food container'' means an aluminum, bi-metal, steel, tin-plated steel, or other metallic can, plate or tray of any size or shape used to package food products suitable for human or animal consumption.

(12) ''Newspaper'' means used or discarded newsprint which has a minimum of contamination by food or other material.

(13) ''Office paper'' means used or discarded high-grade white paper and manila paper including, but not limited to, paper utilized for file folders, tab cards, writing, typing, printing, computer printing, and photocopying, which is suitable for recycling and which has a minimum of contamination.

(14) ''Plastic Container'' means any plastic packaging having a relatively inflexible finite shape or form, with a maximum capacity of three fluid gallons or its equivalent volume, that is capable of maintaining its shape while holding other products, including, but limited to, bottles, cartons and other receptacles.

(15) ''Polyethylene terephthalate container'', ''PET container'', or ''PETE container'' means a plastic container that, exclusive of closure or label, is composed of polyethylene terephthalate, a saturated thermoplastic polyester resin and has an

ASTM Resin Identification Number of 1 as defined in ASTM D7611 Standard Practice for Coding Plastic Manufactured Articles for Resin Identification. As used in this section, ''Polyethylene terephthalate container'' does not include containers which held motor oil, pesticides, herbicides or other hazardous substances.

(16) ''Recycle'' for the purposes of sections 22a-24lb-1 to 22a-24lb-4, inclusive, of the Regulations of Connecticut State Agencies means to separate or divert an item or items from the solid waste stream for the purposes of processing it or causing it to be processed into a material product, including the production of compost, in order to provide for disposition of the item or items in a manner, other than incineration or landfilling, which will best protect the environment. Nothing in this definition shall preclude the use of waste oil as fuel in an oil burner.

(17) ''Regional processing center'' means an intermediate processing center which is authorized by a group of municipalities or designated by the commissioner which can recycle an item or items and market the resulting material product or products.

(18) ''Residential high-grade white paper'' means uncoated, printed or unprinted white groundwood-free ledger, bond, writing, and other paper that has similar fiber and filler content generated in a household setting.

(19) ''Scrap metal'' means used or discarded items which consist predominantly of ferrous metals, aluminum, brass, copper, lead, chromium, tin, nickel, or alloys thereof, including, but not limited to, white goods and metal food containers.

(20) ''Storage batteries'' means lead acid batteries or other batteries used in motor vehicles such as automobiles, airplanes, boats, recreational vehicles, tractors and like applications.

(21) ''Waste oil'' means crankcase oil that has been utilized in internal combustion engines.

(Effective February 28, 1989; amended May 1, 2012)

Sec. 22a-241b-2. Items to be recycled

(a) (1) The following items are required to be recycled by each municipality not later than six months after availability of service to the municipality by a regional processing center or local processing system: (A) boxboard, (B) cardboard, (C) glass food containers, (D) HDPE containers, (E) leaves, (F) colored ledger paper, (G) magazines, (H) metal food containers, (I) newspaper, (J) office paper, (K) PET or PETE containers, (L) residential high-grade white paper, (M) scrap metal, (N) storage batteries, and (O) waste oil.

(2) After January 1, 1991, no approval to landfill or incinerate the items specified in subdivision (a)(1) of this section may be granted by the commissioner pursuant to subsection (b) of section 22a-24lb-4 of the Regulations of Connecticut State Agencies.

(Effective February 28, 1989; amended May 1, 2012)

Sec. 22a-241b-3. Management and enforcement plans for solid waste facilities

Within three months of the adoption of this regulation, the owner or operator of each solid waste facility shall submit for the Commissioner's approval, pursuant to Section 22a-209-4 (f) of the Regulations of Connecticut State Agencies, an amended operation and management plan for the solid waste facility. Such plan will make provision to ensure that items required to be recycled will not knowingly be accepted by the solid waste facility except as provided for in Section 22a-241g of the Connecticut General Statutes and subsection (b) of Section 22a-241b-4. Such plan shall reflect the relevant requirements of Chapter 446d of the Connecticut General Statutes and shall include, but not be limited to, systems to notify facility users concerning

the requirements of the recycling program, penalties for noncompliance, and methods for handling recyclable items which are delivered to the solid waste facility. Plans shall be specific to the facility but shall be coordinated with plans of other solid waste facilities and collection systems which may transfer waste to the facility.

(Effective February 28, 1989)

Sec. 22a-241b-4. Municipal requirements

(a) **Planning Requirements.**

(1) Prior to January 1,1991, a municipality shall be deemed to be in compliance with these regulations if it is participating in a regional planning process for recycling approved by the Commissioner or is implementing a recycling plan developed in accordance with the provisions of section 22a-241c of the Connnecticut General Statutes, and approved by the Commissioner in accordance with subsection (c) of Section 22a-227 of the Connecticut General Statutes. Such plan shall at a minimum include a program and schedule to ensure that service will be available by January 1, 1991, for the recycling of each item designated in Section 22a-241b-2, or such other date as provided for by subsection (b) of this section. The plan shall also include interim target dates for recycling items specified in Section 22a-241b-2, for which service is currently available or can be anticipated to become available prior to January 1, 1991. Such plans shall be coordinated with the plans prepared by solid waste facilities in accordance with Section 22a-241b-3 and shall describe the methods of public information and enforcement that will be utilized to ensure that the recycling program is implemented.

(2) In reviewing a plan required by subdivision (a) (1) of this section or when issuing an order pursuant to Sections 22a-241d through 22a-241e inclusive of the Connecticut General Statutes, the Commissioner shall determine when service is available to a municipality and shall deem such service acceptable after considering the status of facilities and systems designed to recycle items. In determining the availability and acceptability of service, facilities and systems, the Commissioner shall consider the following factors: both positive and negative impacts on public health and the environment; severe economic impacts on the municipality, if any; the economic stability of the service; the availability of markets or alternate disposal methods; the capacity to provide service to the municipalities; the date on which service will be available; and the technical viability of the system or facility.

(b) **Exceptions.**

(1) Except as provided in Section 22a-241f of the Connecticut General Statutes and subdivision (a) (2) of Section 22a-241b-2, any municipality or regional authority may apply to the Commissioner for approval to landfill or incinerate one or more of the items listed in Section 22a-241b-2 for a period to be determined by the Commissioner. The Commissioner shall consider such applications based on, but not limited to, the following factors: the availability of markets; the availability of local processing systems; the availability of regional processing centers; the desirability of alternate utilization techniques; any negative impacts on public health or the environment associated with recycling of the item or items; and severe economic impact.

After consideration of the application, the Commissioner shall issue a proposed decision in the matter. Such decision shall specify the approved items, if any, any conditions the Commissioner may require, the municipality or municipalities to which the exception applies, and the time period for which the approval is granted. The Commissioner shall publish in the Connecticut Law Journal a notice of the proposed decision on each such application.

(2) Any municipality, regional authority, or group of twenty-five or more persons which is aggrieved by the Commissioner's proposed decision and which requests a hearing within 30 days of the date of publication of the proposed decision may be granted a hearing. Following such hearing the Commissioner shall issue a final decision in the matter. Such decision shall specify the approved items, if any, any conditions the Commissioner may require, the municipality or municipalities to which the exception applies, and the time period for which the exception is granted. Any party to the hearing who is aggrieved by the final decision of the Commissioner may appeal the decision to the Superior Court as provided for in Section 4-183 of the Connecticut General Statutes.

(3) Except as provided in Section 22a-241f of the Connecticut General Statutes and subdivision (a) (2) of Section 22a-241b-2, the Commissioner may on his or her initiative determine that one or more of the items specified in Section 22a-241b-2 should be landfilled or incinerated for a period to be determined by the Commissioner in order to best serve the public interest. Such determination shall be based on but not limited to the following factors: the availability of markets; the availability of local processing systems; the availability of regional processing centers; the desirability of alternate utilization techniques; impacts on public health or the environment associated with recycling of the item or items; and severe economic impact. The Commissioner shall publish in the Connecticut Law Journal a notice of the proposed exception. Such notice shall specify the proposed items, any conditions the Commissioner may require, the municipality or municipalities to which the exception applies, and the time period for which the exception is granted.

(4) Any municipality, regional authority, or group of twenty-five or more persons which is aggrieved by the Commissioner's proposed exception, and which requests a hearing within 30 days of the date of publication of the proposed decision, may be granted a hearing. Following such a hearing the Commissioner shall issue a final decision in the matter. Any party to the hearing who is aggrieved by the final decision of the Commissioner may appeal the decision to the Superior Court as provided for in Section 4-183 of the Connecticut General Statutes.

(c) **Reporting Requirements.** Each municipal authority, regional recycling authority, or intermediate processing center shall keep a record by recyclable item of the amount of solid waste recycled through municipally or regionally sponsored programs and shall submit this information to the Commissioner by the first day of July of each year. The quantity of solid waste recycled shall be reported on forms provided by the Commissioner. Such forms shall provide for the measurement of quantities of each item listed in Section 22a-241b-2 by generating municipality or recycling region, in the appropriate volume or weight unit and to an accuracy that the Commissioner deems acceptable for compliance with the purposes of the solid waste management plan of the state.

(Effective February 28, 1989)

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Beverage Container Deposit and Redemption

Sec. 22a-245-1. Title

These regulations may be cited as ''Beverage Container Deposit and Redemption Regulations.''

(Effective March 23, 1988)

Sec. 22a-245-2. Definitions

''Reverse vending machine'' means any automated equipment designed to accept empty beverage containers and dispense cash or credit slips.

''Independent audit'' means an analysis of the accuracy of the equipment and procedures involved in the automated redemption process, provided by a certified public accountant or other qualified person not an employee or under the direct control of the owner or operator of the equipment.

(Effective March 23, 1988)

Sec. 22a-245-3. Labeling

(a) To obtain approval of language for labeling, which differs from that specified in subsection (b) of Section 22a-244 of the General Statutes, a manufacturer or distributor shall submit to the Commissioner a printed sample or artist's rendering of the proposed labeling and, on request of the Commissioner, a sample of a beverage container marked with such label. The Commissioner shall notify the manufacturer or distributor in writing of the decision to approve or disapprove the proposed labeling within twenty days of receipt of a suitable sample, artist's rendering, or labeled container.

(b) In no case shall the labeling required by Section 22a-244 of the General Statutes appear only on the bottom of the beverage container. Metal containers shall be embossed or stamped with the required labeling on the top of the container.

(Effective March 23, 1988)

Sec. 22a-245-4. Redemption of beverage containers by dealers

If a dealer provides a reverse vending machine as the method for consumers to redeem beverage containers, it shall be the responsibility of the dealer to assure the availability of the machine for use by consumers during normal business hours. In the event of mechanical breakdown or if for any other reason the reverse vending machine is not available to accept containers, the dealer shall provide an alternate procedure for redemption. An alternate redemption procedure will also be provided for crushed cans or other returnable containers rejected by the reverse vending machine.

(Effective March 23, 1988)

Sec. 22a-245-5. Redemption of beverage containers by distributors

(a) A distributor shall remove, or make arrangements for the removal of all containers from the premises of dealers serviced by the distributor and redemption centers sponsored by such dealers, provided they are located within the territory of the distributor, at intervals appropriate to the volume of containers handled at each site, and at a frequency sufficient to prevent the excessive accumulation of containers on the premises of any dealer or redemption center.

(b) Redemption of containers from independent redemption centers shall be on a frequency schedule agreed to between the distributor and the operator of the redemption center provided that in no event will the frequency be less than once

per month unless the operator agrees that the volume from his center does not warrant monthly collection.

(Effective March 23, 1988)

Sec. 22a-245-6. Vending and reverse vending machines

(a) At each vending machine dispensing beverages in beverage containers, the vending machine dealer shall post redemption information including, but not limited to, the location and business hours of such dealer's headquarters and/or the location and business hours of a redemption center or other dealer, within one mile of the vending machine, with whom the vending machine dealer has made arrangements for handling redemptions.

(b) All agreements under which reverse vending machines provide the documentation for payment by distributors shall include provision for an independent audit at least twice each year.

(Effective March 23, 1988)

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Plastic Bottle Coding

Sec. 22a-255b-1. Definitions

As used in sections 22a-255b-1 to 22a-255b-3, inclusive:

''High density polyethylene'' means a rigid plastic material of polyethylenes with a density of 0.94 grams per cubic centimeter or greater.

''Low density polyethylene'' means polyethylenes with a density of less than 0.94 grams per cubic centimeter.

''Other'' means a plastic bottle consisting of a single resin other than polyethylene terephthalate, high density polyethylene, polyvinyl chloride, low density polyethylene, polypropylene, or polystyrene; or a plastic bottle consisting of a mixture of plastic resins; or a plastic bottle consisting of multiple layers of plastic resins with adhesives or barriers of a material other than the single plastic resin material in the layers; or a plastic bottle with an affixed structure other than the closure and label which consists of a different material than the plastic bottle itself.

''Plastic bottle'' means a container, exclusive of closure, with a capacity of sixteen ounces or more composed primarily of one or more plastics.

''Polyethylene terephthalate'' means a saturated, thermoplastic polyester resin.

''Polypropylene'' means a thermoplastic resin made by polymerizing propylene with catalysts.

''Polystyrene'' means polymers of styrene.

''Polyvinyl chloride'' means a vinyl plastic.

(Effective November 30, 1989)

Sec. 22a-255b-2. Design

(a) Code numbers and acronyms shall be designed to facilitate reading at a glance, to withstand container handling, and to be compatible with processing systems. The code number and acronym shall be located on the base of the plastic bottle. Each code number and acronym letter shall be at least one quarter of an inch in height and at a scale of seven letters per inch in width.

(b) The code numbers and acronyms shall be as follows:

(1) For polyethylene terephthalate: the acronym ''PETE'' and the number ''1.''

(2) For high density polyethylene: the acronym ''HDPE'' and the number ''2.''

(3) For polyvinyl chloride: the acronym ''V'' and the number ''3.''

(4) For low density polyethylene: the acronym ''LDPE'' and the number ''4.''

(5) For polypropylene: the acronym ''PP'' and the number ''5.''

(6) For polystyrene: the acronym ''PS'' and the number ''6.''

(7) For other: the acronym ''OTHER'' and the number ''7.''

(c) The code number may be placed within a triangular configuration of arrows on a plastic bottle.

(Effective November 30, 1989)

Sec. 22a-255b-3. Application

(a) Effective upon the date mandated by Section 22a-255b of the Connecticut General Statutes, any plastic bottle sold or offered for sale in Connecticut shall have imprinted or molded on its base a code number and acronym as identified in Section 22a-255b-2 of the Regulations of Connecticut State Agencies. The code number and acronym applied to any plastic bottle shall be subject to verification upon written request of the Commissioner and shall correctly identify the container material composition consistent with the definitions in Section 22a-255b-1 of the Regulations of Connecticut State Agencies with the following exceptions:

(1) Polyethylene terephthalate carbonated soft drink bottles with affixed high density polyethylene base cups shall utilize the acronym and code number in Subdivision 22a-255b-2 (b) (1) of the Regulations of Connecticut State Agencies; and

(2) Any plastic bottle where the affixed materials and additives other than the single plastic resin bottle structure exceed ten percent by weight of the total mass, shall be coded with the code number and acronym specified in Subdivision 22a-255b-2 (b) (7) of the Regulations of Connecticut State Agencies.

(b) Municipalities shall publicize the codes and acronyms in the context of their recycling program public education efforts.

(Effective November 30, 1989)

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Soil and Water Conservation District and Council on Soil and Water Conservation

Secs. 22a-315-1—22a-315-9.

Repealed December 24, 2002.

Sec. 22a-315-10. Definitions

As used in sections 22a-315-11 to 22a-315-19, inclusive, of the Regulations of Connecticut State Agencies:

(1) ''Alternate'' means a person duly elected pursuant to section 22a-315-12 of the Regulations of Connecticut State Agencies as an alternate member of the board of directors of any soil and water conservation district;

(2) ''Board of directors'' means the board of supervisors of any soil and water conservation district established pursuant to section 22a-315 of the Connecticut General Statutes and section 22a-315-12 of the Regulations of Connecticut State Agencies, including an alternate who has been duly seated;

(3) ''Commissioner'' means the Commissioner of Environmental Protection;

(4) ''Council'' means the Council on Soil and Water Conservation established pursuant to subsection (c) of section 22a-315 of the Connecticut General Statutes;

(5) ''Department'' means the Department of Environmental Protection;

(6) ''Director'' means a person duly elected pursuant section 22a-315-12 of the Regulations of Connecticut State Agencies as a member or a duly seated alternate of the board of directors of any soil and water conservation district;

(7) ''District'' means any of the soil and water conservation districts established pursuant to section 22a-315 of the Connecticut General Statutes and 22a-315-11 of the Regulations of Connecticut State Agencies;

(8) ''Eligible voter'' means a person over the age of eighteen (18) years who resides or owns real property within the district for which board of directors or alternates are sought;

(9) ''Executive director'' means the executive director of the Council on Soil and Water Conservation authorized pursuant to section 22a-315 of the Connecticut General Statutes;

(10) ''Independent audit'' means an audit of all funds received and expended by a board of directors of any district during the prior state fiscal year which is conducted in accordance with the regulations adopted pursuant to section 4-236 of the Connecticut General Statutes by an independent auditor, as defined in section 4-230 of the Connecticut General Statutes, who is not a director or alternate of such board or a representative of the Council;

(11) ''Nominating committee'' means a committee appointed by a standing board of directors of any soil and water conservation district to nominate district candidates for director and alternate to such board of directors for the next term of office;

(12) ''Person'' means a citizen of the United States of America; and

(13) ''State fiscal year'' means the fiscal year commencing on July 1 of each calendar year and ending on June 30 of the following calendar year.

(Adopted effective December 24, 2002)

Sec. 22a-315-11. Establishment of soil and water conservation districts

Ninety (90) days after the effective date of these regulations, the following soil and water conservation districts shall exist in Connecticut and shall be geographically described as follows:

(1) In southwestern Connecticut a district covering: Ansonia; Beacon Falls; Bethany; Branford; Bridgeport; Cheshire; Darien; Derby; East Haven; Easton; Fairfield; Greenwich; Guilford; Hamden; Meriden; Middlebury; Milford; Monroe; Naugatuck; New Canaan; New Haven; North Branford; North Haven; Norwalk; Orange; Oxford; Prospect; Redding; Ridgefield; Seymour; Shelton; Southington; Stamford; Stratford; Trumbull; Wallingford; Waterbury; West Haven; Weston; Westport; Wilton; Wolcott, and Woodbridge;

(2) In southcentral Connecticut a district covering: Berlin; Chester; Clinton; Colchester; Cromwell; Deep River; Durham; East Haddam; East Hampton; Essex; Haddam; Hebron; Killingworth; Lyme; Madison; Marlborough; Middlefield; Middletown; Newington; New Britain; Old Lyme; Old Saybrook; Portland; Rocky Hill; Salem; Westbrook;

(3) In northcentral Connecticut a district covering: Avon; Bloomfield; Bolton; Bristol; Burlington; Canton; East Granby; East Hartford; East Windsor; Ellington; Enfield; Farmington; Glastonbury; Granby; Hartford; Manchester; Plainville; Simsbury; Somers; South Windsor; Stafford; Suffield; Tolland; Vernon; West Hartford; Wethersfield; Willington; Windsor, and Windsor Locks;

(4) In northwestern Connecticut a district covering: Barkhamsted; Bethel; Bethlehem; Bridgewater; Brookfield; Canaan; Colebrook; Cornwall; Danbury; Goshen; Hartland; Harwinton; Kent; Litchfield; Morris; New Fairfield; New Hartford; New Milford; Newtown; Norfolk; North Canaan; Plymouth; Roxbury; Salisbury; Sharon; Sherman; Southbury; Thomaston, Torrington; Warren; Washington; Watertown; Winchester; and Woodbury; and

(5) In eastern Connecticut a district covering Andover; Ashford; Bozrah; Brooklyn; Canterbury; Chaplin; Columbia; Coventry; Eastford; East Lyme; Franklin; Griswold; Groton; Hampton; Killingly; Lebanon; Ledyard; Lisbon; Mansfield; Montville; New London; North Stonington; Norwich; Plainfield; Pomfret; Preston; Putnam; Scotland; Sprague; Sterling; Stonington; Thompson; Union; Voluntown; Waterford; Windham, and Woodstock.

(Adopted effective December 24, 2002)

Sec. 22a-315-12. Election of the board of directors

(a) **Number.**

Each board of directors shall consist of at least eight (8) and no more than eleven (11) directors and no more than five (5) alternates, to be specified in each district's bylaws. Each director or alternate shall reside or own land within the boundaries of such district and shall be elected pursuant to this section.

(b) **Initial Election of Directors and Alternates.**

(1) Any person who, on the effective date of this section is a supervisor or alternate of an existing board of supervisors shall continue to serve as such supervisor or alternate until the election of directors and alternates for the five districts established in section 22a-315-11 of the Regulations of Connecticut State Agencies.

(2) Not less than thirty (30) nor more than ninety (90) days after the effective date of these regulations, the executive director of the Council, in consultation with each chairman of the board of supervisors of the existing eight (8) districts, shall notice, call and conduct a special meeting in each of the five (5) districts to elect a board of directors and alternates for each district.

(3) At the request and direction of the chairman of the Council, each chairman of the board of supervisors for each of the eight (8) districts shall form committees to nominate candidates for directors and alternates to the five (5) districts. Eligible voters who attend the special meeting may make additional nominations. Each

nomination shall include the candidate's qualifications, including his or her residency or land ownership within the district, and the initial term of office to which each candidate is nominated. A person eligible to be nominated need not be present to be nominated and elected.

(4) Directors and alternates elected at the special meeting shall serve staggered terms. Four (4) directors shall serve terms of two years and such portion of the third year until that year's annual meeting; three (3) directors shall serve terms of one year and such portion of the second year until that year's annual meeting; and any remaining director(s) shall serve terms until the next annual meeting. Alternates shall serve terms of one year. Each of these directors and alternates shall serve from the date of their election.

(5) Any vacancies arising before term expiration among the initially elected directors shall be filled by an alternate selected pursuant to subsection (f) of this section. Alternates selected to fill such vacancies shall serve the balance of the unexpired term.

(6) Not more than sixty (60) days after the special meeting and the initial election of directors and alternates, the chairman of the Council shall call a meeting of each newly elected board of directors to elect a chairman, vice-chairman, recording secretary and treasurer of each such board of directors by a majority vote of such directors.

(c) **Elections and Special Meetings.**

(1) Each director and alternate to each board of directors shall be elected by a majority vote of eligible voters present at the annual meeting of each such board. A person eligible to be nominated need not be present to be nominated and elected.

(2) Special Meetings.

(A) In addition to the special meeting held to elect initial directors and alternates, special meetings may be held:

(i) By the board of directors to place an alternate into a vacant and unexpired term of any director;

(ii) To receive nominations from the board of directors and eligible voters to fill a vacant and unexpired term of any alternate; or

(iii) At the discretion of the district chairman, or upon written request of one-third (1/3) of the directors of such district.

(B) The district chairman shall notify all district directors and alternates of such special meetings by written notice. Such written notice shall be mailed seven (7) days prior to such meeting via the United States Postal Service, certified or registered mail, return receipt requested. Written notice of a special meeting shall be sent to the Office of the Secretary of the State not less than twenty-four (24) hours prior to such meeting. Such written notice shall specify the date, time, place, and the business to be transacted at such meeting. No business shall be considered at a special meeting other than that which is so specified in the written notice.

(d) **Terms of Office for Directors and Alternates.**

After the initial terms set forth in section 22a-315-12(b) of the Regulations of Connecticut State Agencies, directors shall serve for terms of three years each. Alternates shall serve for terms of two (2) years each.

(e) **Eligibility.**

1. A person, eighteen (18) years of age or older, residing or owning land within the geographic boundaries of a soil and water conservation district, shall be eligible to:

(A) Be nominated and elected as a director or alternate to the board of directors in that district; and

(B) vote in the election of such directors and alternates.

2. Only those persons present at the annual meeting of each district shall be eligible to vote for directors and alternates.

(f) **Absences and Vacancies.**

In the absence of any director, the chairman of the board of directors may appoint any duly elected alternate to fill that director's position during his or her absence. Any duly elected alternate may fill a vacancy in the board by a majority vote of the remaining directors on the board. An alternate elected to fill a vacancy shall serve for the balance of the unexpired term which he or she is filling.

(g) **Terms of Office for the Chairman, Vice-chairman, Recording Secretary and Treasurer.**

During the annual meeting or not later than 30 days following such meeting, each board of directors shall elect a chairman, vice-chairman, recording secretary and treasurer by majority vote of the quorum of such directors.

(Adopted effective December 24, 2002)

Sec. 22a-315-13. Operating procedures

(a) **Quorum**.

A quorum shall be one (1) more than half of the number of directors, including vacancies and any official action of the board must be the result of a majority vote of the quorum.

(b) **Regular Meetings.**

Each district shall hold regularly scheduled meetings as necessary to perform official actions of the board.

(c) **Annual Meeting.**

Each district shall hold an annual meeting to conduct elections for the expiring terms of directors and alternates and to present the annual report. Such annual meeting shall be held in each district within five (5) calendar months following the close of the state fiscal year.

(d) **Notice.**

(1) Each district shall cause to be published a written notice of the annual meeting and election or special meeting not more than sixty (60) days and not fewer than thirty (30) days before the date of such meeting. Such notice shall appear in one or more newspapers having a general circulation in each town or city for that district.

(2) Each notice shall include:

(A) The name of the district and the name of the towns and cities within the district and the date, time and place of the meeting;

(B) A statement of the purpose of the meeting. For an annual meeting, the purpose of the meeting shall include the election of directors and alternates to the board from and by eligible voters, and to present the annual report;

(C) The names of any persons to be nominated by the nominating committee of each board of directors provided such nominating committee has made such nominations; and

(D) A statement about how additional information about such meeting may be obtained.

(e) **Annual Plan of Operation.**

(1) By April 30 of each calendar year the board of directors of each district shall prepare a draft annual plan of operation. Such draft plan of operation shall:

(A) Be consistent with the district's responsibilities pursuant to section 22a-315 of the Connecticut General Statutes and sections 22a-315-10 to 22a-315-19, inclusive, of the Regulations of Connecticut State Agencies;

(B) Set forth and describe the district's goals and objectives for the upcoming year, the requisite actions and resources necessary for achieving such goals and objectives, the performance measures to be used in determining the effectiveness of a course of action, and any potential constraints to achieving such goals and objectives; and

(C) Include the annual budget necessary to implement such annual plan of operation.

(2) The board of directors shall submit such draft plan of operation to the commissioner and the chairman of the Council by May 5th of each year.

(3) The commissioner, or designee, and the chairman of the Council, or designee, shall review the draft annual plan of operation and budget and may provide comments to the district board of directors.

(4) By June 30 of each calendar year the board of directors of each district shall consider such comments, if any, and adopt the annual plan of operation and annual budget in final form with appropriate revisions by majority vote.

(5) By July 31 of each calendar year the board of directors of each district shall submit the approved annual plan of operation to the commissioner and the chairman of the Council.

(f) **Annual Report.**

(1) By September 1st of each calendar year the board of directors of each district shall prepare a draft annual report consistent with the annual plan of operation. Each board of directors shall submit such draft annual report to the commissioner and the chairman of the Council by September 15th of each year.

(2) The commissioner and the chairman of the Council, or designees, shall review the draft annual report and may provide comments to each board of directors. By October 1st of each calendar year the board of directors for each district shall consider the comments received from the commissioner and chairman of the Council, if any, and vote to approve the annual report with appropriate revisions.

(3) A copy of the approved report signed by the chairman of the board of directors shall be provided to the commissioner and to the chairman of the Council prior to the annual meeting of that district. Such report shall be presented to the public at the annual meeting of each district.

(4) The annual report shall contain the following information:

(A) An introduction by the chairman that includes a listing of the current members and alternates of the board of directors; and

(B) A description of actions taken to achieve the objectives identified in the prior year's annual plan of operation.

(g) **Annual Audit.**

By December 31 of each calendar year, each board of directors shall cause to be conducted and submitted to the commissioner and the chairman of the Council an independent audit of all funds received and expended by such board in the prior state fiscal year in accordance with sections 4-230 to 4-236 of the Connecticut General Statutes.

(h) **Committees.**

Each board of directors may provide for the creation of committees and the appointment of board members thereto to assist such board in carrying out its responsibilities.

(i) **Representatives to the Council.**

Each board of directors shall select directors from that district to the Council pursuant to section 22a-315-16 of the Regulations of Connecticut State Agencies.

(j) **Conflict of Interest.**

No director or alternate shall be an employee or contractor of any soil and water conservation district.

(k) **Bonding.**

Each officer and each bookkeeper of each district shall be bonded to the amount of the annual budget of that district.

(*l*) **Other Procedures.**

(1) The board of directors for each district may adopt by-laws, provided such by-laws are not inconsistent with these regulations and Chapter 446h of the Connecticut General Statutes.

(2) Not later than one (1) year after the effective date of these regulations, each board of directors shall submit any by-laws adopted by such board to the commissioner and to the chairman of the Council. If any changes to the by-laws are subsequently made, they shall be submitted to the commissioner and the chairman of the Council within 30 days of their adoption.

(3) Robert's Rules of Order, as amended, shall be followed for procedures not covered by these regulations, chapter 446h of the Connecticut General Statutes or the by-laws adopted for any district or the Council.

(Adopted effective December 24, 2002)

Sec. 22a-315-14. Authorized activities

(a) The board of directors of each district shall:

(1) Advise the commissioner on matters of soil and water conservation, erosion and sedimentation;

(2) At the request of the commissioner, assist the Department in the implementation of Departmental programs, projects and policies including, but not limited to, those related to land treatment measures for watershed protection, flood prevention programs, and resource conservation;

(3) Develop annual reports;

(4) Develop long-range goals, objectives and priorities for soil and water conservation, erosion and sedimentation control, and storm water management including water quality and quantity;

(5) Develop written annual plans of operation to implement such objectives and priorities;

(6) Set priorities for activities in each district that are consistent with the approved annual plan of operation;

(7) Implement annual plans of operation and establish, by written policy, written agreement, or written memoranda of understanding programs that may involve technical or other assistance provided by the Council, or any local, regional, state, federal or not for profit organization. Copies of such policies, agreements or memoranda shall be delivered to the commissioner upon request;

(8) Appoint representatives to serve on Department committees as may be required by statute, regulation or written agreement; and

(9) Cooperate with the Connecticut State Forester, the Connecticut Commissioner of Agriculture, the Commissioner of Environmental Protection and other soil and water conservation districts as may be appropriate to carry out the responsibilities authorized in section 22a-315 of the Connecticut General Statutes and sections 22a-315-10 to 22a-315-19 of the Regulations of Connecticut State Agencies.

(b) The board of directors of each district may:

(1) Review and comment upon local and regional projects affecting soil and water resources;

(2) Develop written policies or enter into written agreements with municipalities to perform soil and water conservation, erosion and sedimentation control, and storm water management;

(3) Provide technical assistance, information and education to the public on soil and water conservation, erosion and sediment control, and storm water management including water quality and quantity;

(4) Use or provide for the use of state equipment made available pursuant to section 22a-316 of the Connecticut General Statutes;

(5) Enter into written contracts and employ staff and consultants and other assistants on a contract basis in accordance with section 22a-315(b) of the Connecticut General Statutes;

(6) Acquire property by purchase, lease, gift, or otherwise and to hold such property in the name of the district; and

(7) Receive funds, by transfer, grant or otherwise from the commissioner, including grants pursuant to section 22a-317 of the Connecticut General Statutes, or by donation or subscription from other sources and expend such funds in accordance with the Connecticut General Statutes and the Regulations of Connecticut State Agencies.

(Adopted effective December 24, 2002)

Sec. 22a-315-15. Establishment of the council on soil and water conservation

(a) The commissioner hereby establishes a Council, as authorized by subsection 22a-315(c) of the Connecticut General Statutes, that shall be known as the Council on Soil and Water Conservation.

(b) The Council shall have the powers and duties as set forth in Section 22a-315 of the Connecticut General Statutes.

(Adopted effective December 24, 2002)

Sec. 22a-315-16. Membership

(a) The Council shall consist of nine (9) members. Members shall be selected in accordance with subsection 22a-315(c) of the Connecticut General Statutes. Each member shall have one vote.

(b) Five directors elected by their respective soil and water conservation districts shall serve for a term of two (2) years, except members selected following the initial election of each district's board of directors may serve a portion of the third year until that year's annual meeting. Each term of office shall begin on the first day of the calendar month next succeeding the election of each representative for membership on the Council. The initial selection of directors to a Council shall be elected as follows: within thirty (30) days after the initial election of each district's board of directors, each board shall elect a director as its representative member to the Council. Another director shall be similarly selected as such board's alternate representative.

(c) The Council shall include ex-officio members as set forth in subsection 22a-315(c) of the Connecticut General Statutes.

(d) In the event a Council member representing a district is absent, an alternate Council member from such district shall be seated by majority vote of the Council members present.

(Adopted effective December 24, 2002)

Sec. 22a-315-17. Council officers and their duties

(a) The officers of the Council shall be a chairman, vice-chairman, secretary and treasurer, each of whom shall be elected.

(b) Members of the Council shall elect officers each year during the regular meeting held in April of each calendar year. Officers shall serve for a term of one (1) year commencing July 1 next following their election. In the event elections are delayed, a Council member shall continue to serve until a successor is elected. A vacancy in the offices of the Council shall be filled by a vote of the Council at the next regular or special meeting.

(c) The chairman shall prepare for the approval and adoption of the Council at the regular October meeting of the Council: a draft annual plan and budget; and an annual report for the time period corresponding to the state fiscal year that just ended. The chairman shall also be responsible for preparation of agendas and for presiding over meetings. The chairman may exercise other duties, consistent with chapter 446h of the Connecticut General Statutes and sections 22a-315-10 through 22a-315-19 of the Regulations of Connecticut State Agencies, as voted upon by the Council.

(d) The vice-chairman shall, in the absence of the chair perform the duties of the chairman and may exercise other duties, consistent with chapter 446h of the Connecticut General Statutes and sections 22a-315-10 through 22a-315-19 of the Regulations of Connecticut State Agencies, as voted upon by the Council.

(e) The recording secretary shall be responsible for notice of all meetings, taking of minutes and certifying official actions taken by the Council. The recording secretary may exercise other duties, consistent with chapter 446h of the Connecticut General Statutes and sections 22a-315-10 through 22a-315-19 of the Regulations of Connecticut State Agencies, as voted upon by the Council.

(f) The treasurer shall be responsible for maintaining financial records for the Council, preparing an annual financial report and preparation of financial reports as may be requested by the Council.

(g) A member shall excuse himself or herself from discussions and voting on any matter before the Council in which he or she, or his or her spouse, children, or employer has a direct or indirect personal financial interest.

(Adopted effective December 24, 2002)

Sec. 22a-315-18. Council meetings

(a) **Regular meetings.**

The Council shall meet at least quarterly. Such meetings shall occur on the third Thursday of January, April, July and October of each calendar year or as the Council may decide. The Council shall notify the Secretary of the State of the date, time and place of each regular meeting as required by the Connecticut General Statutes.

(b) **Notice of Regular Meeting**

Written notice of each regular meeting, including an agenda, shall be sent to the members and the ex-officio members at least two weeks prior to such meeting. The agenda shall be posted at least twenty-four hours prior to the meeting in the office of the Secretary of the State or at the regular office of the Council.

(c) **Action on Items not Included in the Regular Agenda**.

The Council may vote to consider and act upon any business not included in such filed agenda.

(d) **Special meetings.**

A special meeting may be called by the Council chairman or commissioner, at the Council chairman's or commissioner's discretion, or upon the written request of one-third (1/3) of the members of the Council. The chairman or commissioner, as appropriate, shall notify all Council members and ex-officio members of such special meeting by written notice. Such written notice shall be mailed seven (7)

days prior to such meeting via the United States Postal Service, certified or registered mail, return receipt requested. Written notice of a special meeting shall be sent to the office of the Secretary of the State not less than twenty-four (24) hours prior to such meeting. Such written notice shall specify the time, place, and the business to be transacted at such meeting. No business shall be considered at a special meeting other than that which is so specified in the written notice.

(e) **Annual Report, Annual Plan and Budget.**

An annual report and an annual plan and budget shall be prepared in accordance with section 22a-315-17(c) of the Regulations of Connecticut State Agencies to support the goals and objectives of the Council.

(f) **Quorum.**

Five (5) members of the Council shall constitute a quorum and any official action of the Council must be the result of a majority vote of the quorum.

(Adopted effective December 24, 2002)

Sec. 22a-315-19. Additional procedures

(a) The Council may adopt by-laws, provided such by-laws are not inconsistent with these regulations and Chapter 446h of the Connecticut General Statutes.

(b) Not later than one (1) year after the effective date of these regulations, each board of directors shall submit any by-laws adopted by such board to the commissioner. If any changes to the by-laws are subsequently made, they shall be submitted to the commissioner within 30 days of their adoption.

(c) Robert's Rules of Order, as amended, shall be followed for procedures not covered by section 22a-315-10 to 22a-315-19 of the Regulations of Connecticut State Agencies, chapter 446h of the Connecticut General Statutes or the by-laws adopted by the Council.

(Adopted effective December 24, 2002)

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Grants to Municipalities and Lake Associations to Improve the Water Quality of Recreational Lakes

Sec. 22a-339d-1. Definitions, practice and procedures

(a) **Definitions**

''Applicant'' means municipality or lake association.

''Agreement'' means a written contract between the Department of Environmental Protection and an applicant for a diagnostic feasibility study or eutrophication abatement project.

''Baseline study'' means the acquisition of data and information about lake quality and characteristics necessary to assign a priority rating.

''Commissioner'' means the Commissioner of Environmental Protection.

''Construction'' means building, erecting, or installing structural components of lake management or watershed management programs and any lake sediment removal program.

''DEP Trophic Classification Inventory'' means Department of Environmental Protection Bulletin No. 3, A Trophic Classification Inventory of Seventy Connecticut Lakes, 1980, as may be amended.

''Diagnostic feasibility study'' means a study to characterize lake water quality conditions, identify watershed sources of nutrients and sediments, and evaluate lake management activities and watershed management activities to abate eutrophication.

''Eutrophication'' means nutrient enrichment or sedimentation causing excessive phytoplankton, macrophyton, or dissolved oxygen depletion which impairs recreation.

''Eutrophication abatement'' means the implementation of lake management activities and watershed management activities to prevent, reduce, or correct eutrophication.

''Federal Act'' means the Federal Clean Water Act (33 U.S.C. 1251 et. seq., as amended).

''Implementation'' means the process of accomplishing lake management activities and watershed management activities recommended by a diagnostic feasibility study.

''Lake'' means all natural and artificial impounded bodies of water listed by the Secretary of the State as lakes, ponds, and reservoirs pursuant to section 3-100 of the General Statutes.

''Lake association'' means a lake association as defined by section 1 of Public Act 87-492.

''Lake management activities'' means procedures and processes implemented within a lake to achieve eutrophication abatement.

''Municipality'' means municipality as defined in section 22a-423 of the General Statutes or a lake authority established pursuant to section 7-151a of the General Statutes.

''Public recreation'' means the right of ingress by the general public for water based recreation through some form of access without charge or at a fee determined to be reasonable by the Commissioner.

''Project'' means project as defined in section 1 of Public Act 87-492.

''Regional population'' means the sum of the populations of all towns with a boundary line within ten miles of the shoreline of the lake.

''Subagreement'' means a written agreement between a grant recipient and another party for services, supplies, equipment, or construction necessary to conduct a diagnostic feasibility study or implement a eutrophication abatement project.

''Watershed'' means that land area from which water drains into a lake.

''Watershed management activities'' means procedures and processes implemented within a lake watershed to achieve eutrophication abatement through control of nutrients and sediments.

(b) **Eligibility.** The Commissioner may make grants to municipalities and lake associations which have completed baseline studies and qualify for funding of the costs of diagnostic feasibility studies and eutrophication abatement programs for lakes used for public recreation, according to the criteria of the state priority rating system.

(c) **State Priority System.** Each project application shall be given points as applicable for each of the following rating criteria, the sum of which shall determine its priority number. These criteria are consistent with the rating system used by the Commissioner to establish priorities for federal lakes management grants under section 314 of the Federal Act.

Priority Rating Point System

I. Lake Water Quality (35 points maximum)

A. Trophic Classification, as determined by methods and procedures in the DEP Trophic Classification Inventory.

1. Oligotrophic — 30 points
2. Mesotrophic — 5 points
3. Eutrophic — 20 points
4. Highly Eutrophic — 35 points

B. Aquatic Macrophytes, as determined by methods and procedures in the DEP Trophic Classification Inventory.

1. Mesotrophic or eutrophic lakes with macrophyte beds occupying more than 30% of total lake surface area — an additional 10 points

II. Recreation Opportunities (70 points maximum)

A. Regional Population (25 points maximum)

1. Greater than 500,000 — 25 points
2. 100,000 to 500,000 — 15 points
3. Less than 100,000 — 5 points

B. State Owned Or Leased Access (20 points maximum)

1. Boat Launch — 15 points
2. Park — 5 points

C. Town and Lake Association Owned Or Leased Access (15 points maximum)

1. Town Beach, each — 5 points
2. Association Beach, each — 5 points

D. Recreational Fisheries (10 points maximum)

1. Fisheries Impaired By Eutrophication (As determined by DEP Fisheries Bureau) — 10 points

III. Lake Size (45 points maximum)

A. Surface Area

1. Greater than 325 acres — 25 points
2. Between 175 and 325 acres — 20 points
3. Between 90 and 174 acres — 15 points
4. Between 50 and 89 acres — 10 points
5. Between 10 and 49 acres — 5 points
6. Less than 10 acres — 0 points

B. Maximum Depth

1. Greater than 50 feet — 20 points
2. Between 20 and 50 feet — 15 points
3. Between 12 and 19 feet — 10 points
4. Less than 12 feet — 15 points

IV. Project Status (30 points maximum)

A. Diagnostic Feasibility Grants

1. Diagnostic feasibility study not initiated — 15 points
2. Diagnostic feasibility study not initiated, to include innovative research with statewide applications — 25 points
3. Diagnostic feasibility study initiated but incomplete — 30 points
4. Eutrophication abatement initiated, additional diagnostic feasibility study needed — 5 points
5. Eutrophication abatement initiated, additional diagnostic feasibility study needed, to include innovative research with statewide applications — 15 points

B. Eutrophication Abatement Grants

1. Diagnostic feasibility study complete, eutrophication abatement not initiated — 20 points
2. Eutrophication abatement initiated, incomplete — 30 points

V. Natural Trophic Tendency (20 points maximum)

The natural trophic tendency of a lake is determined by procedures described in ''A Connecticut Lakes Management Program Effort,'' Proceedings: Lake Management Conference, University of Connecticut, Institute of Water Resources, Report No. 30, March 1979.

A. Oligotrophic Tendency — 20 points

B. Mesotrophic Tendency — 15 points

C. Eutrophic Tendency — 5 points

(d) **State Project Priority List**

(1) Priority List.

The Commissioner may prepare a listing of projects ranked according to their priority ratings, for which state grant assistance shall be made available for the period effective October 1 to the following September 30, the program funding year, corresponding to the federal fiscal year. The priority list shall contain two parts, a fundable part and a planning part. The fundable part shall consist of those

highest priority projects ready to proceed and anticipated to be funded within the current fiscal year. The planning part shall consist of those projects that may be funded from future funding authorizations.

(2) Annual Public Hearing.

The allocation of funds to projects on the priority list shall be determined annually by the Commissioner based upon available funding and applications received prior to October 1, 1988 and prior to August 1 of each succeeding year. The draft priority list will indicate which specific projects are proposed to receive funding for the upcoming program funding year and shall be made public at least 30 days prior to a specified date for a public hearing. The Commissioner will consider all written and oral testimony presented at the hearing and may elect to modify the draft priority list on the basis of such testimony. The Commissioner shall also indicate his or her reasons for accepting or rejecting any suggested revisions as part of the hearing record. Following notice of any changes to the priority list which may result from the hearing, the priority list shall be deemed final except for minor revisions allowable under subdivision (3) of this subsection.

(3) Revisions to the Priority List.

The Commissioner may remove a project from the fundable part to the planning part of the priority list if he or she determines that the bypassed project will not be ready to proceed within the first six months of the funding year. The Commissioner shall advise, in writing, each applicant which he or she intends to bypass and the reasons therefor. Projects bypassed will be replaced by the next highest ranking project ready to proceed. Projects will be removed from the priority list the following year after they receive a grant, except for segmented projects described in subdivision (4) of this subsection.

(4) Segmented Projects.

Eutrophication abatement projects which require more than one year to implement, such as sediment removal projects, may be funded annually for costs anticipated for the subsequent year. After a segmented project receives the initial grant award, the project will remain on the top of the fundable portion of the priority lists in subsequent years until the project is completed.

(Effective July 27, 1988)

Sec. 22a-339d-2. Requirements for grant applications

(a) **Level of State Assistance.**

(1) The grant to an applicant for a diagnostic feasibility study shall be seventy five percent of the allowable costs. If federal funds are available under the Federal Act in the amount of seventy per cent of the costs, the state grant shall be twenty per cent of the costs. The combined federal and state grant shall not exceed ninety percent of the costs.

(2) The grant to an applicant for a eutrophication abatement program shall be fifty per cent of the costs. If federal funds are available under the Federal Act in the amount of fifty percent of the costs, the state grant shall be twenty five percent of the costs. The combined federal and state grant shall not exceed seventy five percent of the costs.

(3) At least thirty percent of the available funds shall be allocated to diagnostic feasibility studies, unless a sufficient number of applications is not received to utilize this allocation.

(b) **Grant Applications.** An applicant applying for state funding assistance must file properly executed forms and applications prescribed by the Commissioner. In addition, the following supporting documentation shall be submitted as appropriate:

(1) an application for diagnostic feasibility study funding assistance shall include:

(A) an identification of the lake and a geographic map of the lake watershed;

(B) a baseline study;

(C) copies of all pertinent previous diagnostic feasibility studies;

(D) a statement of the applicant's interest in seeking funding under the Federal Act and the steps taken to obtain such funding;

(E) a plan of study including:

(i) the nature and preliminary scope of the study, including a preliminary schedule for the completion of specific tasks;

(ii) a proposed public participation program including at least one public meeting during the diagnostic portion of the study and one public meeting to present the recommended eutrophication abatement program;

(F) a resolution adopted by the applicant's governing body authorizing a specific person to file the application and execute the agreement for the grant. The resolution must be certified and sealed by the town clerk, lake authority secretary or lake association district clerk;

(G) documented evidence that the applicant's share of funding is in place.

(2) An application for eutrophication abatement funding assistance shall include:

(A) a diagnostic feasibility study meeting all the requirements set forth in subsection (a) of section 22a-xxx-3 of the Regulations of Connecticut State Agencies;

(B) if the applicant is seeking funding under the Federal Act, all other information necessary to comply with 40 CFR Part 35 Subpart H;

(C) a statement demonstrating to the Commissioner's satisfaction that the local authorities who will be implementing the eutrophication program have the necessary legal, financial, institutional, and managerial resources to insure proper design, construction, installation, operation, maintenance, and monitoring of the proposed projects;

(D) proposed subagreements, or an explanation of the intended method of awarding subagreements, for performance of any substantial portion of the project;

(E) a resolution, adopted by the applicant's governing body authorizing a specific person to file the application and execute the agreement for the grant. The resolution must be certified and sealed by the town clerk, lake authority chairman, or lake association district clerk;

(F) any proposed or executed (as determined appropriate by the Commissioner) inter-municipal agreements necessary for the design, construction, operation and maintenance and monitoring of the proposed projects;

(G) a schedule detailing dates for design, construction, and completion of proposed projects;

(H) documented evidence that the applicant's share of funding is in place;

(I) a statement from the applicant's counsel that certifies all necessary easements or rights-of-way have been acquired;

(J) copies of applications for federal, state, and local permits necessary for implementation of the proposed project.

(3) Terms of Funding Assistance.

Grant agreements will be executed as formal contractual agreements between the Department of Environmental Protection and the applicant and shall be subject to the following terms and conditions:

(A) the Commissioner may condition grants as he or she deems appropriate;

(B) the Commissioner may require the applicant to establish watershed management practices to prevent the occurrence of eutrophication;

(C) no grant assistance will be allowed for any work performed before a grant award without the prior written approval of the Commissioner;

(D) payment terms will be established by the grant agreement and shall be based on accomplished tasks;

(E) the award of a grant for a diagnostic feasibility study does not constitute a commitment to approval of a subsequent application for a diagnostic feasibility study grant or eutrophication abatement grant;

(F) the Commissioner may require post implementation water quality monitoring reports as a condition of a grant for eutrophication abatement.

(Effective July 27, 1988)

Sec. 22a-339d-3. Technical program elements

(a) **Diagnostic feasibility study requirements.** Diagnostic feasibility studies consist of those necessary plans and studies which directly relate to the development of eutrophication abatement programs. The diagnostic portion of a study consists of lake water quality monitoring and data acquisition to characterize trophic conditions, and watershed studies to identify sources of nutrients and sediments contributing to eutrophication. The feasibility portion of a study consists of an evaluation of alternative methods and procedures to abate eutrophication by control of watershed sources of nutrients and sediments and by management of water quality conditions within the lake.

(1) Content of diagnostic feasibility studies.

The content of the diagnostic feasibility study shall be determined by the Commissioner based on a pre-study conference with the applicant and its consultant regarding the precise plan of study and resulting scope of services to be performed. If deemed appropriate by the Commissioner, a second conference may be held following the diagnostic portion of the study and prior to the feasibility portion of the study. Diagnostic feasibility studies shall address each of the following as determined appropriate by the Commissioner:

(A) a description of the physical characteristics of the lake including location, surface area, mean depth, maximum depth, volume, bathymetry, major hydrologic inflows and outflows, and outflow structures;

(B) a description of the type and amount of public access to the lake;

(C) a review of historical water quality data and the scopes and findings of previous diagnostic feasibility studies;

(D) maps and descriptions of lake watershed characteristics including bedrock geology, soils, slopes, wetlands, land use, and existing zoning;

(E) identification of existing and potential sources of nutrients and sediments including but not limited to residential land, roadway drainage, streambank erosion, construction related erosion, agricultural practices (in consultation with the County Soil and Water Conservation District), and migratory waterfowl and gulls;

(F) lake water quality monitoring data to characterize trophic conditions and identify problems. A quality assurance project plan shall be prepared for proposed monitoring. At a minimum, monitoring shall be conducted at spring overturn, early summer, and late summer and shall include as appropriate secchi disk transparency, temperature and dissolved oxygen structure of the water column, phytoplankton densities and identification of dominant species, nitrogen and phosphorus structure of the water column, mapping of areal extent and density of macrophytes, and physical and chemical characteristics of lake sediments;

(G) field and laboratory quality assurance and quality control documentation records;

(H) a description of the historical and existing biological resources of the lake, particularly fish and waterbird populations;

(I) a review of historical recreational uses of the lake and a description of the uses that are presently impaired by eutrophication;

(J) a review of alternative procedures and methods for controlling watershed sources of nutrients and sediments including technical feasibility, potential adverse environmental impacts, preliminary design of structural elements, and estimate costs;

(K) a review of existing local watershed management programs and a recommended program to insure implementation of best management practices to control watershed sources of nutrients and sediments;

(L) a review of alternative methods and procedures for management of water quality within the lake including technical feasibility, potential adverse environmental impacts, preliminary design of structural elements, and estimated costs;

(M) a recommended eutrophication abatement program identifying selected lake management alternatives and watershed management alternatives including estimated capital costs, estimated operation and maintenance costs, implementation schedules, and post implementation monitoring and estimated costs;

(N) a review of the legal, financial, institutional and managerial resources of local authorities and a recommended management plan to insure local implementation of the eutrophication abatement program;

(O) identification of easements and rights-of-way necessary to implement the eutrophication abatement program;

(P) identification of federal, state, and local permits required to implement the eutrophication abatement program;

(Q) a summary of public participation in the development of the recommended eutrophication abatement program;

(R) if the applicant receives funding under the Federal Act, all other information necessary to comply with 40 CFR Part 35 Subpart H, Appendix A.

(Effective July 27, 1988)

Sec. 22a-339d-4. Administrative program elements

(a) **Allowable Project Costs.** The following costs associated with diagnostic feasibility studies and eutrophication abatement programs are eligible for funding assistance:

(1) costs of salaries, benefits and expendable materials the applicant incurs for the project, except as provided for in subdivision (b) (6) of this section;

(2) diagnostic feasibility study report costs directly related to the development of a eutrophication abatement program;

(3) professional, consultant, and contractor services;

(4) preparation of construction drawings, specifications, estimates, and construction contract documents;

(5) costs under approved construction contracts;

(6) costs of complying with sections 22a-1 to 22a-1h, inclusive of the General Statutes;

(7) equipment, instruments, supplies, and chemicals to operate and maintain lake management systems and to conduct post implementation water quality monitoring;

(8) start-up services of new lake management systems including training of the applicant's employees;

(9) costs of complying with the procurement requirements of these regulations;

(10) costs of operation, maintenance, and monitoring of lake sediment removal projects;

(11) costs for controlling agricultural sources of nutrients and sediments if reviewed and recommended by the County Soil and Water Conservation District;

(12) weed harvesting equipment and weed harvesting disposal plans.

(b) **Unallowable Project Costs.** Costs not directly related to the development of a diagnostic feasibility study or eutrophication abatement program are unallowable. Such costs include, but are not limited to:

(1) costs outside the scope of the approved project;

(2) costs of preparation of applications, including a baseline study, preliminary plan of study, and permits required by federal, state, or local laws and regulations;

(3) administrative, professional, and legal activities associated with the establishment of special departments, agencies, commissions, regions, districts, or other units of government;

(4) personal injury compensation or damage arising out of the project whether determined by arbitration, negotiation, or otherwise;

(5) fines and penalties due to violations of, or failure to comply with, federal, state or local laws or regulations;

(6) ordinary operating expenses of the applicant, such as salaries and expenses of officers, not related to the project;

(7) costs of water quality monitoring not conducted in accordance with a quality assurance project plan;

(8) approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project and the interest on them;

(9) costs of operation, maintenance, and monitoring of lake management systems and watershed management systems after the first year of operation, except as provided in subdivisions (a) (10) and (c) (5) of this section;

(10) the cost of land acquired in fee simple or by lease or easement to provide public access to a lake;

(11) lake management based principally on the application of aquatic pesticide chemicals;

(12) diagnostic feasibility studies of municipal and industrial wastewater treatment plant discharges to Class B impoundments;

(13) the costs of municipal and industrial wastewater treatment to remove nutrients from discharges to Class B impoundments.

(c) **Allowable Project Costs, If Approved.** The following project costs may be allowed by the Commissioner:

(1) the cost of land acquired in fee simple or by lease or easement that will be an integral part of a eutrophication abatement program;

(2) the temporary application of aquatic pesticide chemicals if used in conjunction with the start-up of another lake management system;

(3) costs of mitigating adverse environmental effects of winter drawdown for macrophyte control;

(4) costs of managing populations of waterbirds;

(5) costs of operation, maintenance, and monitoring of lake management systems if the state has a continuing interest in the project.

(d) **Required Provisions of Professional Services Contracts.** Municipalities and lake associations shall include subagreement clauses that meet the following requirements:

(1) each subagreement must include provisions defining a sound and complete agreement, including the:

(A) nature, scope, and extent of work to be performed;

(B) time frame for performance;

(C) total costs of subagreement;

(D) payment provisions;

(2) all subagreements awarded in excess of $10,000 shall contain provisions requiring compliance with State and Federal equal employment opportunity laws and regulations.

(e) **Required Provisions of Construction Contracts.**

(1) All construction contract specifications shall include the following provisions:

(A) bid bond in an amount of 5 percent of bid price:

(B) a statement which indicates a time period for project completion;

(C) a dollar amount, per day, for liquidated damages;

(D) extra work and change order profit amounts;

(E) contractor's insurance, minimum amounts as follows:

(i) contractor's comprehensive and general liability and property damage, $1,000,000 liability — $500,000 property;

(ii) owner's protective liability and property damage, $1,000,000 liability — $500,000 property;

(iii) contractor's comprehensive motor vehicle liability and property damage, $1,000,000 liability — $500,000 property.

(2) Where required by statute, executive order, or regulation, all construction contract specification shall include the following additional provisions:

(A) payment and performance bonds each for 100% of bid price (section 49-41 of the General Statutes);

(B) maximum retainage on payments to contractors must not exceed 5 percent (section 49-41b of the General Statutes);

(C) enforcement of payment by general contractor to subcontractor (section 49-41a of the General Statutes);

(D) substitution of securities for retainage (section 3-112a of the General Statutes);

(E) nondiscrimination clause (section 4-114a of the General Statutes);

(F) a copy of Executive Order No. Three;

(G) prevailing State Wage Rates (section 31-53 of the General Statutes);

(H) a copy of Executive Order No. Seventeen;

(I) contractor's exempt purchase certificate (section 12-426-18 of the Regulations of Connecticut State Agencies);

(J) contractor's worker's compensation insurance (chapter 568 of the General Statutes).

(f) **Types of Contracts.** Each contract shall be a fixed price (lump sum or unit price or a combination of the two) contract, unless the Commissioner gives prior written approval for the applicant to use some other acceptable type of contract. The cost-plus-percentage-of-cost type of contract shall not be used in any event.

(g) **Construction Contract Procurement Requirements.** The applicant shall conduct all procurement transactions in a manner that will provide maximum, open, and free competition. Procurement practices shall not unduly restrict or eliminate competition. Examples of practices considered to be unduly restrictive include:

(1) noncompetitive practices between contractors and firms;

(2) bid collusion;

(3) organizational conflicts of interest;

(4) unnecessary experience and bonding requirements;

(5) local laws, ordinances, regulations, or procedures which give local bidders or proposers preference over other bidders or proposers in evaluating bids or proposals;

(6) placing unreasonable requirements on firms in order for them to qualify to do the project work.

(h) **Advertising.** If the value of the contract is less than $25,000 then a minimum of 3 bids shall be solicited. Each construction contract equal to or in excess of $25,000 shall be awarded after advertising, and advertising shall be in accordance with the following:

(1) the applicant shall cause notice to be given of the solicitation by publication in journals or newspapers of general circulation beyond the applicant's locality, inviting bids on the project work and stating the method by which bidding documents may be obtained or examined;

(2) adequate time, not less than 10 days, shall be allowed between the date when public notice is last published and the date by which bids must be submitted. Bidding documents (including specifications and drawings) shall be available to prospective bidders from the date when such notice is first published;

(3) the applicant shall prepare a reasonable number of bidding documents (invitations for bids) and shall furnish them upon request on a first-come, first-served basis. The applicant shall maintain a complete set of bidding documents and shall make them available for inspection and copying by any party. The bidding documents shall include:

(A) a complete statement of the work to be performed, including necessary drawings and specifications, and the required completion schedule;

(B) the terms and conditions of the contract to be awarded;

(C) a clear explanation of the method of bidding and the method of evaluating the bid prices, and the basis and method for award of the contract;

(D) responsibility requirements or criteria which will be employed in evaluating bidders;

(E) the following statement:

''Any contract or contracts awarded under this invitation for bids are expected to be funded in part by a grant from the State of Connecticut (Department of Environmental Protection). Neither the State of Connecticut nor any of its departments, agencies or employees is or will be a party to this invitation for bids or any resulting contract.''

(F) the prevailing State Wage Rates in accordance with section 31-53 of the General Statutes;

(4) the applicant shall provide for bidding by a sealed bid and for the safeguarding of bids received until public opening;

(5) if an applicant desires to amend any part of the bidding documents (including drawings and specifications) during the period when bids are being prepared, the addenda shall be communicated in writing to all firms which have obtained bidding documents at least five working days prior to the bid opening. Any applicant which fails to comply with this deadline and then proceeds to open bids, may not receive funding assistance for any costs associated with such addenda;

(6) a firm which has submitted a bid shall be allowed to modify or withdraw its bid before the time of bid opening;

(7) the applicant shall provide for a public opening of bids at the place, date, and time announced in the bidding documents;

(8) award shall be made to the lowest, responsible, qualified bidder as follows:

(A) after bids are opened, the applicant shall evaluate them for conformance with the methods and criteria set forth in the bidding documents;

(B) the applicant may reserve the right to reject all bids. Unless all bids are rejected for good cause, award shall be made to the lowest, responsible qualified bidder;

(C) if the applicant intends to make the award to a firm which did not submit the lowest bid, it shall prepare a written statement before any award, explaining why each lower bidder was deemed nonresponsible or unqualified. The applicant shall retain such statement in its files and forward a copy to the Commissioner for review.

(i) **Reporting Requirements.** The applicant shall secure, in writing, the Commissioner's authorization to award each construction contract which has an aggregate value over $10,000. The request for such authorization shall include:

(1) name, address, telephone number, and employee identification number of the construction contractor;

(2) amount of the award;

(3) estimated starting and completion dates;

(4) project number, name, and site location of the project; and

(5) a copy of the tabulations of bids or offers and the name of each bidder or offeror.

(j) **Professional Services Procurement Requirements.**

(1) Cost-plus-percentage-of-cost and percentage-of-construction-cost contracts are prohibited. Cost reimbursement, fixed price, or per diem contracts or combinations of these may be negotiated for professional services. A fixed price contract is generally used only when the scope and extent of work to be performed is clearly defined. In most other cases, a cost reimbursement type of contract is more appropriate. A per diem contract may be used if no other type of contract is appropriate. An incentive fee may be used if the applicant submits an adequate independent cost estimate and price comparison.

(2) Adequate public notice shall be given for the procurement of professional services for all subagreements. Applicants shall publish a notice of request for qualifications in newspapers or publications of general circulation over a reasonable area and, in addition, if desired, through posted public notices or written notification directed to interested persons, firms, or professional organizations inviting the submission of statements of qualifications. The announcement shall clearly state the deadline and place for submission of qualification statements. Public notice is not required under the following circumstances:

(A) for the design or construction phases of a eutrophication abatement project if the applicant is satisfied with the qualifications and performance of any engineer who performed all or any part of the design work and the engineer has the capacity to perform the subsequent steps;

(B) the applicant desires the same consultant to provide professional services for the subsequent steps or for subsequent segments of design work under one grant if a eutrophication abatement project is segmented into two or more construction projects. If the design work is accordingly segmented so that the initial contract for preparation of construction drawings and specifications does not cover the entire eutrophication abatement project to be built under one grant, the applicant may use the same engineering firm that was selected for the initial segment of design work for subsequent segments.

(3) Requests for professional services proposals shall be sent to no fewer than three candidates who either responded to the public announcement or were selected from the prequalified list, unless, after good faith effort to solicit qualifications, fewer than three qualified candidates respond, in which case all qualified candidates must be provided requests for proposals. Requests for professional services proposals shall be in writing and shall contain the information necessary to enable a prospective offeror to prepare a proposal properly. The request for proposals shall include a solicitation statement, inform offerors of the evaluation criteria and clearly state the deadline and place for submission.

(4) All proposals submitted in response to the request for professional services proposals shall be uniformly evaluated. The applicant shall also evaluate the candidate's proposed method of accomplishing the work required.

(5) (A) Applicants are responsible for negotiation of their contracts for professional services. Contract procurement including negotiation may be performed by the applicant directly or by another person or firm retained for the purpose and may include the services of technical, legal, audit, or other specialists to the extent appropriate.

(B) The applicant shall submit to the Commissioner documentation of the public notice of need for professional services and selection procedures, and a copy of the proposed subagreement.

(C) The Commissioner shall review the complete subagreement procurement procedure and approve the applicant's compliance with appropriate procedures before the applicant awards the subagreement.

(k) **Deviations.**

The Commissioner may approve deviations from the requirements of subsections (d) to (j), inclusive, of this section when he or she determines that such deviations are essential to effect necessary grant actions or when special circumstances make such deviations in the best interest of the State.

(*l*) **Federally funded projects.**

If the applicant is receiving funding under the Federal Act, procurement procedures must comply with 40 CFR Part 33.

(Effective July 27, 1988)

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Level A Mapping

Sec. 22a-354b-1. Regulations for mapping wells in stratified drift aquifers to level A standards

(a) **Definitions.**

(1) The definitions of the following terms used in this section shall be the same as the definitions in Section 22a-354h of the general statutes: aquifer; aquifer protection area; area of contribution; municipality; recharge area; stratified drift; well field.

(2) The definition of ''water company'' shall be the same as the definition in Section 25-32a of the general statutes.

(3) As used in this section:

''Aquifer test'' means a yield test conducted for the purposes of evaluating the capacity of a well or well field for withdrawing water from an aquifer, of analyzing the hydraulic properties of the aquifer, of evaluating the effects of induced infiltration on surface water bodies, and/or of identifying the effects of other boundaries on the pumping well(s).

''Area of influence'' means the land area that directly overlies and has the same horizontal extent as the part of the water table or other potentiometric surface that is perceptibly lowered by the withdrawal of water. The area of influence delineated by the use of modeling shall be that area of land in which the water table or potentiometric surface is lowered by at least 0.5 feet.

''ASCII'' means American Standard Code for Information Interchange.

''Calibration'' means the adjustment of model input data for the purpose of matching model-generated output with field-measured values.

''Commissioner'' means the Commissioner of Environmental Protection or his designated agent.

''Conceptual model'' means a qualitative description of the physical characteristics and operating processes of an aquifer system.

''Critical drought event for stream flow'' means the lowest average stream flow over a continuous period of seven days with a calculated return frequency or recurrence interval of once in every ten years.

''Hydraulic boundaries'' means boundaries as described in the U.S. Geological Survey publication entitled, Techniques of Water Resources Investigations of the United States Geological Survey, Book 3, Chapter B5, ''Definition of Boundary and Initial Conditions in the Analysis of Saturated Ground-Water Flow Systems — An Introduction,'' O. Lehn Franke, Thomas E. Reilly, and Gordon D. Bennett, 1987.

''In use,'' when referring to existing well fields in use, means well fields in which any constituent well is identified, in the water supply plan which is current as of the date that level A maps are required to be complete under section 22a-354c and 22a-354d of the general statutes, as an active source of supply and which is not identified as solely an emergency source of supply.

''Indirect recharge area'' means an area from which water by overland flow or ground-water discharge is contributed to a surface watercourse which flows into the area of contribution.

''Initial setback'' means a distance from a pumping center that would represent the radius of an area approximately equal to the area of influence, as determined from Level B mapping.

''Level B mapping'' means a methodology to map the locations of existing and potential well fields, as required pursuant to Section 22a-354b of the general statutes.

''Model'' means a representation of a natural system consisting of a mathematical representation of two- or three-dimensional flow in an aquifer based on differential equations known to govern ground-water flow.

''Sensitivity analysis'' means an analysis which determines the degree of influence that various input parameters have on model results by varying individual input parameter values during a series of simulations.

''Simulation'' means the use of an operating model of a system or process.

''Sink'' means a process whereby, or a feature from which, water is extracted from the ground-water flow system.

''Stratified drift aquifer'' means a predominantly sorted sediment laid down by or in meltwater from glaciers and includes sand, gravel, silt and clay arranged in layers.

''Source'' means a process whereby, or a feature from which, water is added to the ground-water flow system.

''Steady state flow'' means a condition in which the amount of water flowing into a defined volume of the aquifer is equal to the amount flowing out of that volume. Under steady state flow conditions the head distribution in an aquifer is constant over time.

''Transient flow'' means a condition in which the amount of water flowing into a defined volume of the aquifer is equal to the amount flowing out of that volume plus or minus some amount of water held in the volume as storage. Under transient flow conditions the head distribution in an aquifer varies as a function of time.

''Verification'' means demonstration of a calibrated model's ability to simulate an historic hydrologic event for which field data are available.

''Water budget mass balance'' means an accounting of volumes and rates of water gains and losses from ground water, produced by a computer model simulation.

''Water supply plan'' means a plan prepared by a water company serving more than 1000 persons and approved by the Department of Health Services pursuant to section 25-32d of the general statutes.

(b) **Plan for Data Collection and Analysis.**

Each water company required by Sections 22a-354c and 22a-354z of the general statutes, to perform Level A mapping for existing well fields in use and potential well fields shall submit to the Commissioner for his review and written approval two copies of a plan for data collection and analyses which meets the requirements of subsections (d) and (e) of this section, and includes the information specified in subdivisions (1) through (5) of this subsection. Maps and reports prepared to fulfill Level B mapping, diversion applications pursuant to section 22a-369 of the general statutes, and ground water safe yield calculations provided in a water supply plan may be included in the plan to provide data to satisfy some of the requirements of this subsection. The plan shall include the following:

(1) A summary of all existing hydrologic and geologic data and information pertaining to the aquifer system in which the well or well field is, or is planned to be located, including, but not limited to:

(A) the location of each of the following which are within the estimated area of contribution: commercial, industrial, and irrigation wells that have the capacity to withdraw more than 50,000 gpd of water; borings; observation wells; and water company supply wells. Such locations shall be plotted on a 1:24,000 U. S. Geological Survey topographic map. In areas where data points are of a density such that they may not be clearly shown at the scale of 1:24,000, an enlargement of that area showing the data shall be provided. The following additional data shall be provided:

(i) historic pumping rates of each well within the estimated area of contribution plotted over the last ten years, including, but not limited to, average daily rate for the most recent twelve months of operation, estimated maximum daily rate, and the average daily rate during critical drought events, if known;

(ii) all data, information, and calculations from conducted pump tests for each well; and

(iii) geologic logs of available borings and wells;

(B) locations of available geophysical surveys conducted in the estimated area of contribution;

(C) estimated stream flow characteristics, including, but not limited to, flow duration and low flow frequency of any surface water body that may be affected by the pumping well(s).

(D) a description of any known ground water contamination which can reasonably be expected to be drawn into the well field during the aquifer testing required by subsection (d) (4), including (if known), but not limited to, the contaminant and concentrations in the ground water, and location of the source and extent of the contaminant plume, plotted on a 1:24,000 U. S. Geological Survey topographic map.

(2) A conceptual model of the aquifer system, describing its physical characteristics, its operating processes, and the behavior of ground and surface water under pumping and non-pumping conditions. At a minimum, this conceptual model shall include Level B mapping of the well field and description of the boundary conditions. The model may also include preliminary mathematical modeling. The conceptual model discussion shall be based only on the information and data specified in subdivision (b) (1) of this section and as set forth in subparagraphs (A) to (G) of this subdivision and shall include, but not be limited to, the following:

(A) a geologic description of the aquifer system, with at least two cross sections perpendicular to each other that transect the well field and a map showing areal distribution of the water-bearing formation, if the information is available, or surficial geology, if information on the water-bearing formation is not available, and:

(i) textural descriptions of the geologic units, with specific identification and description of any known confining or semi-confining layers; and

(ii) a list of the sources of information for geologic interpretations;

(B) contour maps, with control points identified on the maps, of:

(i) the water table under non-pumping or specified pumping conditions; and

(ii) bedrock elevations;

(C) estimates of hydraulic conductivity and specific yield of various aquifer units for unconfined aquifers or transmissivity distribution for confined aquifers, with a description of methods and any references used to estimate these values;

(D) a description of the physical limits of the area to be modeled with a discussion of the hydraulic boundaries known or assumed to exist;

(E) a discussion of the sources and sinks found within the area of contribution and the aquifer;

(F) an estimate of the area of contribution; and

(G) a map or maps at a scale of 1:24,000 (1″ = 2000′) showing the estimated extent of the area of contribution.

(3) A proposed plan to conduct the data collection required by subsection (d) of this section. The plan shall include, but not be limited to, the following:

(A) Discussion of the number, locations, and specifications of proposed test borings, as required by subdivision (d) (1) of this section. Existing borings may be

used to define the aquifer stratigraphy only if the geologic logs of those borings are available and are suitable for interpretation of aquifer properties;

(B) Discussion of the number, locations, and specifications of proposed observation wells and piezometers as required by subdivision (d) (2) of this section. Existing observation wells and piezometers may be used to gather water level data only if a well's construction characteristics and its physical relationship to the aquifer are known and meet the requirements of subdivision (d) (2) of this subsection.

(C) Locations, instrumentation, and procedures proposed to measure stream flow and stage as required by subdivision (d) (3) of this section.

(D) Discussion of the aquifer tests to be conducted, as required by subdivision (d) (4) of this section. This proposal shall include, but not be limited to, the following:

(i) the types of aquifer tests with detailed descriptions of any potential constraints or problems related to conducting the aquifer test. If there is known ground-water contamination in the vicinity of the well field, also include an evaluation of the potential to induce contaminant migration into the well field during the aquifer test;

(ii) identification of the well(s) to be pumped and observation wells to be monitored;

(iii) the pumping rate to be used;

(iv) frequency and level of accuracy of discharge rate measurements from pumping well(s). If unavoidable fluctuations in the discharge rate are anticipated, a discussion of how this will be accounted for in the testing and/or analysis shall be provided;

(v) construction specifications of the pumping well(s) and pump(s)

(vi) location of the outfall discharge line;

(vii) frequency and level of accuracy of precipitation measurements:

(viii) an estimate, using existing data, of the duration of the aquifer test and a reference to the analytical methods used for this estimate;

(ix) frequency and level of accuracy of drawdown measurements in pumping well and observation wells;

(x) frequency and level of accuracy of water level recovery measurements in pumping well and observations wells;

(xi) frequency and accuracy of stream flow and stage measurements; and

(xii) frequency and level of accuracy of temperature measurements of the discharge water and surface water, if the test is to quantify induced infiltration.

(4) A proposed plan to conduct the ground-water modeling required by subsection (e) of this section. The plan shall include, but not be limited to, the following:

(A) An identification of the ground-water model to be used to simulate flow and delineate the area of contribution.

(i) Models shall have the following characteristics:

(aa) a water budget mass balance shall be part of the solution;

(bb) the model shall provide a two- or three-dimensional solution of ground-water flow;

(cc) an exact copy of the computer code shall be available in ASCII format; and

(dd) an explanation of the code theory shall be available;

(ii) In determining the acceptability of the model, the Commissioner shall also include, but not be limited to, consideration of the following:

(aa) the degree to which the computer code is readily available to the Department of Environmental Protection staff and to the public;

(bb) the degree to which the code is well-tested and widely accepted; and

(cc) the capability of the Department of Environmental Protection staff to use the model.

(iii) Examples of acceptable models are:

(aa) ''Finite-Difference Model for Simulation of Ground-Water Flow in Two Dimensions,'' Trescott, P.C., Pinder, G.F. and Larson, S.P., U. S. Geological Survey, 1975; and

(bb) ''Modular Three Dimensional Finite-Difference Ground-Water Flow Model,'' McDonald, M.G. and Harbaugh, A.W., U. S. Geological Survey, 1983.

(iv) Under the conditions listed below, the use of analytical models may be permitted in lieu of numerical (digital) techniques at the Commissioner's discretion. If the Commissioner allows analytical modeling to be used, the well field shall be mapped in accordance with subsection (h) of this section. If drawdown, as determined by the analytical model, exceeds ten percent of the saturated thickness for the stratified drift aquifer, numerical modeling shall be conducted. The Commissioner may allow analytical modeling if:

(aa) the existing or potential well field has a total allowable pumping rate of less than 100,000 gallons per day as determined from either the water supply plan submitted under section 25-32d of the general statutes or the diversion registration or permit issued pursuant to sections 22a-362 or 22a-373 of the general statutes, whichever is greatest;

(bb) pumping will cause water levels to be affected over the entire stratified drift aquifer;

(cc) the area of influence can be shown not to extend to any lateral boundary and it can be shown to the satisfaction of the Commissioner that anisotropic aquifer conditions will not significantly affect the shape of the area of influence or those effects can be corrected; or

(dd) existing land use and zoning in the estimated area of contribution and direct recharge areas for the existing or potential well field consists entirely of low density residential development, state park land, and/or municipal or other open space, and there are no existing, planned, or zoned commercial, industrial or institutional land uses within the estimated area of contribution or direct recharge areas.

(B) Written documentation that the model analyst has at least a bachelor of science degree in the earth sciences or engineering with an emphasis in earth sciences, and two years professional experience and/or training in numerical and analytical ground-water modeling.

(C) A discussion of the proposed model application strategy with particular attention given to how the unconfined, partially confined or fully confined aquifer system shall be modeled.

(D) A discussion of how the hydraulic boundaries identified in subsection (b)(2)(D) above shall be simulated in the model.

(E) A discussion of the data to be used as input to the model that identifies data sets that are to be derived from field collection, literature searches, and those sets that are based on assumptions.

(F) A discussion of model sensitivity analyses, identifying the parameters to be tested during the model sensitivity testing and potential ranges of variation for each parameter.

(G) A discussion of the discretization scheme that shall be utilized during final modeling simulations, identifying the use of either a regular or variable spaced grid and indicating an approximate range of cell dimensions and areas.

(H) A discussion of the approach and methods to be used for model calibration and verification as required by subdivision (e) (1) of this section. Proposed calibration and verification goals shall be described in detail. At a minimum these goals shall include the following:

(i) matching of simulated water levels with actual water levels measured in observation wells; and

(ii) a simulation mass balance difference (comparison of sources and discharges) of no greater than 0.5 percent.

(I) A discussion of the approach and methods to be used for predictive simulations to delineate the area of influence, as required by subdivision (e) (2) of this section.

(5) Any other information which the Commissioner deems necessary in order to assure that the proposal for data collection and analysis will result in the accurate delineation of the area of contribution and areas of recharge to the well field.

(6) A water company may propose in the plan for data collection and analysis that certain of the requirements of subsections (d) and (e) will not be met. Such a proposal shall include, but not be limited to, the following:

(A) a demonstration that such requirements are not necessary, that an alternative proposal would provide sufficient and appropriate data, or that existing data are sufficient, to accurately delineate the area of contribution and recharge areas of the particular well field, or that the constraints of the physical operation of the water system will not allow such requirements to be met; and

(B) a complete description of and justification for any proposed alternative data collection or analysis methods.

(c) **Compliance With Approved Plan.**

(1) Upon receipt of the Commissioner's written approval of the plan for data collection and analysis, the water company shall conduct the proposed data collection and analyses in accordance with the approved plan.

(2) If, at any time before written approval of the Level A map under section 22a-354d of the general statutes, the water company becomes aware that hydrogeologic conditions have changed such that the approved plan for data collection and analysis will no longer provide accurate data for the delineation of the area of contribution and the recharge areas for a well field, or that any information submitted was erroneous or any relevant information was omitted, the water company shall submit within thirty days an amendment to the plan for data collection and analysis for the Commissioner's review and written approval. The amendment shall fully describe the changes, error, or omission and propose modifications to the plan to ensure that accurate delineation of the area of contribution and recharge areas will be obtained.

(3) If field conditions during data collection necessitate modifications to the approved plan for data collection and analysis, the water company shall use best professional judgement and proceed with appropriate modifications. The alternative methods for data collection and analysis shall ensure that accurate delineation of the area of contribution and recharge areas can be obtained using the resulting data. The water company must subsequently submit to the Commissioner for review and written approval, documentation of the necessity of the modification, justification for the alternative methods used, and a discussion of the suitability of the data collected. The alternative methods used shall ensure that accurate delineation of the area of contribution and recharge areas can be obtained using the data collected as a result of the modification. The water company shall collect and submit additional data to the Commissioner, if the Commissioner determines that the modifications resulted in unsuitable data.

(d) **Data Collection**

All hydrogeologic data used in determining the area of contribution and the recharge area pursuant to this section shall be collected in accordance with the provisions of this subsection. Any data type not described in this subsection shall be collected, processed and interpreted in an accepted scientific manner, with references to methods used specified in the plan for data collection and analysis required by subsection (b) and final reports required by subsection (g).

(1) Test borings.

The number and locations of test borings shall be adequate to fully define the aquifer stratigraphy, given the approximate size of the area of contribution and the complexity of the aquifer material. The test borings shall be conducted as follows:

(A) Drilling methods and equipment shall assure the collection of samples that identify major textural changes.

(B) Borings shall penetrate the entire saturated thickness of the aquifer whenever possible.

(C) Samples of formation material shall be taken at depth intervals of five feet or less. Such samples shall be labeled with test boring well number and depth interval. In addition:

(i) samples shall be collected by use of split spoon samplers or other core barrel sampling devices capable of retaining samples of unconsolidated material; and

(ii) all samples shall be retained by the water company for inspection by the Commissioner until sixty days after a municipality delineates an aquifer protection area on a local map in accordance with section 22a-354n of the general statutes.

(D) Boring logs shall be kept for all borings. The boring logs shall describe the materials penetrated, and shall include, but not be limited to:

(i) the depth at which there is a layer of material that differs in texture or other appearance from the materials found above or below it;

(ii) the thickness of each such layer;

(iii) a visual description of the material which identifies the constituent grain sizes, using the Wentworth grade scale, and gross color;

(iv) a description of drill behavior in the comments section of the boring log;

(v) a description of sampling methods, including, but not limited to:

(aa) the type of sampling device being used, the method of driving the sampling device, and the weight and fall distance of the hammer;

(bb) intervals sampled;

(cc) percent recovery of samples;

(dd) blow count; and

(vi) a site sketch of boring locations with a bar scale, north arrow, and the exact distances of the borings from two specified permanent landmarks noted.

(2) Observation wells and piezometers.

Observation wells and piezometers shall be adequate in number, of proper construction, and in proper locations to allow determination of aquifer parameters, the response to the stress created by the aquifer tests, and the locations and effects of hydraulic boundaries. The number and location of observation wells and piezometers shall be determined by the approximate size of the area of contribution, the complexity of the aquifer system and the number and location of the well(s) to be pump tested.

(A) The number of observation wells and their locations may vary with hydrogeologic and boundary conditions as well as with the purpose of the wells:

(i) Observation wells screened for the purpose of model construction and calibration shall be sufficient in number and in appropriate locations to allow for water levels in various hydrogeologic and physiographic units to be determined.

(ii) At least two observation wells shall be installed between the water supply well(s) and each potential hydraulic boundary within the estimated area of contribution. At least one additional observation well shall also be installed beyond each surface water body that has been tentatively identified by the modeler as a hydraulic boundary.

(iii) At least one observation well is required to monitor background water levels outside the area of influence during the aquifer test.

(B) Nested observation wells screened at appropriate intervals shall be installed to evaluate:

(i) the presence and characteristics of confining or semi-confining layers;

(ii) the effects of partial penetration of pumping well(s) where such conditions are expected to occur during the aquifer test; and

(iii) vertical hydraulic conductivity.

(C) All observation wells and piezometers shall be tested for response by injecting or removing a known volume of water into the observation well and measuring the subsequent decline or recovery in water level.

(D) Piezometers installed for the purpose of measuring induced infiltration from a surface water body shall have a minimum inside diameter of one inch and shall be installed into the streambed or lakebed, with the top of the screen at least one foot below the bed materials. Static head changes shall be monitored throughout the pump test.

(E) Observation wells shall be constructed in accordance with the following:

(i) casing material shall have a minimum inside diameter of two inches;

(ii) screens shall be slotted or wire-wound, with a minimum diameter of two inches and a minimum length of eighteen inches;

(iii) where needed, appropriate gravel pack materials shall be installed;

(iv) screened intervals shall be open to the aquifer such that measured water levels represent the head in the aquifer at the interval screened;

(v) when confining layers are penetrated by observation, monitoring, or test wells, the integrity of those layers shall be maintained by emplacement of impermeable backfill in the annular space. Materials used for impermeable backfill shall be bentonite clay or an equally impermeable material;

(vi) locking protective devices shall be used to cap the observation wells; and

(vii) each observation well and piezometer shall be permanently and uniquely labelled.

(F) The depth, diameter, screened interval, distance from pumping well(s), and elevation above sea level shall be determined for each observation well and piezometer.

(G) Observation wells which shall or may be used for collection of water samples for chemical analysis shall be constructed of materials that shall not impact the quality of water to be sampled.

(3) Stream flow and stage measurements.

Stream flow or water stage measurements shall be made, where such measurements will provide accurate and meaningful data, to establish the volume of water flowing in streams or other surface watercourses before, during and after an aquifer test period to determine the effects of an aquifer test on the stage or flow of surface water.

(A) Measuring sections shall be established and stream flow or stage measurements shall be conducted at a minimum of two locations along each watercourse that will be affected by the pumping well(s).

(i) The location of measurement sections shall be based on the estimated limits of the area of influence and suitability of the section for making accurate measurements. The measurement sections shall be located immediately above and immediately below the limits of the estimated area of influence.

(ii) Establishment of measuring sections shall include improvement of channel sections where appropriate in order to facilitate more accurate measurements.

(B) Staff gages or weirs may be installed. Staff gages shall be calibrated using at least eight independent stream flow measurements which bracket discharge conditions expected at the time of aquifer testing. The measurements shall be capable of producing a rating curve with the ability to estimate stream flows within ten percent. A weir shall be calibrated using at least three independent stream flow measurements which bracket discharge conditions expected at the time of aquifer testing.

(C) The altitude of any measuring point from which stage or stream flow measurements are made shall be surveyed and established with respect to the nearest U.S. Geological Survey, National Geodetic Survey, Department of Transportation, or other local benchmark relative to mean sea level.

(D) Stream flow or water stage measurements shall conform to procedures described in the U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A8, Thomas J. Buchanan and William P. Somers, 1969.

(E) Flow duration shall be estimated for any stage or stream flow measurements made by reference to the nearest long term U.S. Geological Survey continuous gaging station.

(4) Aquifer tests.

Aquifer tests shall be performed to determine aquifer properties such as transmissivity and storage coefficient, to evaluate hydraulic boundary conditions, to provide data for model calibration and verification and to quantify induced infiltration from surface water bodies. The aquifer test to quantify induced infiltration may be combined with the aquifer test to quantify aquifer properties and evaluate boundary conditions if the conditions of subsections (d) (4) (A) and (d) (4) (B) can be met:

(A) Aquifer tests to determine aquifer properties, to evaluate hydraulic boundaries and to provide data for model calibration and verification shall be performed in accordance with the following:

(i) Stream flow during the test period shall be less than the stream flow that is equaled or exceeded five percent of the year (five percent duration flow);

(ii) for a well field consisting of multiple wells, aquifer tests shall be performed using one existing well pumping at the highest feasible constant rate. Where contaminants can reasonably be expected to be drawn into the well field during the test, the maximum pumping rate shall be determined with the concurrence of the Commissioner of Health Services;

(iii) All wells in the well field shall be shut down for a period of at least three consecutive days prior to the start of the test. All wells not to be tested shall remain shut down for the duration of the test;

(iv) the rate of pumping for a potential well field shall be the maximum sustainable yield from a test well that is at least six (6) inches in diameter;

(v) wells to be pumped shall be equipped with reliable power, pump, discharge control equipment and water level measuring equipment with an air line and gage, or access for electrical or manual tape or transducer;

(vi) Discharge rate measurements shall be obtained within the first minute of start-up, and checked for stability at no more than five minute intervals for the first thirty minutes. Thereafter, measurements shall be obtained at least once per hour

for the duration of the test. The method used to measure discharge rate shall be accurate to at least ten percent and discharge rate shall not vary by more than ten percent during the test period. All pump discharge variation shall be documented. Unavoidable fluctuations in the discharge rate must be accounted for in the testing and/or analysis procedures;

(vii) the aquifer test outfall discharge line shall be located so as not to affect stream flow and head measurements;

(viii) stream flow shall be measured in accordance with subdivision (d) (3) at a minimum of once per day for a minimum of five consecutive days prior to test start-up;

(ix) precipitation at the site of the aquifer test shall be monitored continuously for a period of from one week prior to start up of pumping through completion of recovery phase, where applicable, using equipment capable of measuring precipitation to within 0.01 of one inch;

(x) for a minimum of five consecutive days before start-up of pump test, water level measurements in each observation well shall be collected at least once per day;

(xi) the duration of an aquifer test for existing or potential well fields shall be estimated using analytical methods suitable for field conditions. Actual duration of the aquifer tests shall also be consistent with the following quality assurance controls:

(aa) the aquifer test shall be continued until such time as sufficient data are collected to allow for interpretation of aquifer properties and hydraulic boundary effects, but shall under no circumstances be less than three days.

(bb) aquifer tests shall be conducted following a period of five days during which rainfall does not exceed (1) one-half inch during any 24-hour period, and (2) one inch in any 72-hour period;

(cc) during the first three days of the aquifer test, rainfall shall not exceed (1) one-half inch during any 24-hour period and (2) one inch during any 72-hour period;

(dd) during the next seven days of the aquifer test, rainfall shall not exceed (1) one inch during any 24-hour period, and (2) two inches during any 72-hour period;

(ee) during testing, there shall be no pump shutdown in the first four hours of pumping, no more than one half hour of shutdown during the next twelve (12) hours of pumping, and no more than one hour of shutdown in any succeeding twenty-four (24) hours of pumping;

(ff) if the above conditions can not be met, the pump test shall be repeated, unless the modeler can demonstrate to the Commissioner that rainfall or pump shutdown had no noticeable effect or that the effect can be negated. In such a case, the modeler shall use best professional judgement to determine if the pump test must be repeated, and if the test is not repeated, the modeler shall, within fourteen days, submit written documentation of the suitability of the test to the Commissioner.

(xii) drawdown in pumping well and observation wells shall be measured with sufficient frequency that each log cycle in time, beginning with time equal to 1.0 minute, contains at least ten water level measurements evenly distributed throughout the cycle. At least two measurements shall be in the time range of 0.1 to 1.0 minutes.

(xiii) ground-water level recovery measurements shall be taken immediately after pumping ceases, with frequency comparable to that of the pumping cycle. Recovery measurements shall continue for a time equal to the pumping cycle.

(xiv) water level measurements shall be accurate to two one-hundredths of a foot.

(xv) barometric pressure shall be continuously monitored for confined and semi-confined conditions.

(B) Aquifer tests to quantify induced infiltration shall be performed in accordance with the following:

(i) stream flow shall be equal to or less than the stream flow that is equaled or exceeded 80 percent of the time (80 percent duration flow) during the test period;

(ii) stream flow shall be measured in accordance with subdivision (d) (3) at a minimum of once per day for a minimum of five consecutive days before test start-up. Stream flow for the three days immediately prior to the aquifer test shall approximate base-flow conditions;

(iii) the rate of simultaneous pumping of all water supply wells shall be constant and as close to the rate specified by the diversion registration or permit as possible. Where contaminants can reasonably be expected to be drawn into the well field during the test, the maximum pumping rate shall be determined with the concurrence of the Commissioner of Health Services;

(iv) the rate of pumping for a potential well field shall be the maximum sustainable yield from a test well at least six (6) inches in diameter in the potential well field area;

(v) the duration of the aquifer test to quantify induced infiltration shall be until such time as sufficient data are collected to allow for interpretation of the effects of pumping on stream flow, but shall, under no circumstances, be less than five days;

(vi) stream flow measurements, as required under subdivision (d) (3), shall be routinely taken throughout the test except during periods of rapidly changing stream flow conditions, as may occur due to a heavy rainfall event;

(vii) temperature of the discharge water and surface water shall be monitored throughout the test; and

(viii) water levels shall be measured in observation wells, at a minimum, on a daily basis for the duration of the test.

(e) **Ground-water flow modeling.**

Numerical modeling of ground-water flow shall consist of separate but related operations, as set forth in subparagraphs (1) to (3), inclusive, of this subsection. The model shall, at a minimum, cover the stratified drift areas.

(1) Initial set-up, calibration, and verification of the model shall be based upon data collected in accordance with the provisions of subsection (d) of this section, and shall be conducted as follows:

(A) A preliminary model shall be constructed by assembling an initial data set of appropriate hydrogeologic parameters.

(B) Sensitivity analyses shall be performed to assess the adequacy of existing data and as a guide for the collection of new data. The sensitivity analyses shall include, but not be limited to, both reductions and increases of at least fifty percent in specified values describing hydraulic conductivity or transmissivity, storage coefficient or specific yield, evapotranspiration and recharge through hydraulic boundaries.

(C) Model input parameters shall be refined using new hydrogeologic data collected in accordance with subsection (d) of this section after the sensitivity analyses have been completed.

(D) The ground-water flow model shall be calibrated for transient flow conditions in accordance with the following:

(i) simulated pumping rates for all wells in the well field shall be equal to actual pumping rates at the time of the calibration event. Wells within the approximated area of influence, but not included in the well field, that have pumping rates of 50,000 gallons per day or more, shall be included;

(ii) initial conditions of areal recharge, evapotranspiration and fluxes to and from the aquifer shall be representative of actual conditions at the time of the calibration event;

(iii) Calibration has been achieved when the following conditions have been met:

(a) The water budget mass balance difference between sources and discharges is less than 0.5 percent;

(b) the difference between simulated water levels and those measured in fifty percent or more of the observation wells is less than two feet;

(c) the difference between simulated water levels and those measured in seventy percent or more of the observation wells is less than five feet;

(d) the maximum difference between simulated water level and that measured in any observation well is less than ten feet; and

(e) simulated ground-water runoff is as close as possible to ground-water runoff estimated from streamflow records collected from the modeled area.

(E) The calibrated ground-water flow model shall be verified by simulating at least one other transient event for which there is hydrogeologic data. Verification has been achieved when all the conditions of (e)(1)(D)(iii) have been met.

(2) A steady-state predictive simulation shall be performed to delineate the area of contribution and determine the water budget mass balance. Such predictive simulation shall be performed in accordance with the following:

(A) Streamflow and associated stream stage shall be the flow equaled or exceeded fifty percent (50%) of the time (50% duration flow);

(B) Mean annual rates shall be specified for precipitation, evapotranspiration and flux across the boundaries; and

(C) The maximum pumping rate allowable for the well field shall be used, in accordance with the following:

(i) The maximum pumping rate as established by the diversion registration or permit, issued pursuant to sections 22a-368 or 22a-373 of the General Statutes; or

(ii) if the maximum diversion registration or permit issued pursuant to sections 22a-368 or 22a-373 of the General Statutes is not sustainable for the predictive simulation, an alternative pumping rate may be determined by the commissioner, in consultation with the Department of Public Health and the water company; or

(iii) in the case of potential wells that the commissioner may map pursuant to subsection (b) of section 22a-354c of the General Statutes, a pumping rate that does not exceed maximum sustainable yield.

(3) Particle tracking, or other vector analyses, shall be applied to the predictive simulation to delineate the area of contribution to the well field.

(f) **Aquifer Mapping.**

(1) The area of contribution shall be determined in accordance with the following:

(A) For well fields for which numerical ground-water flow modeling has been conducted, the area of contribution shall be delineated in accordance with subdivision (3) of subsection (e) of this section.

(B) For well fields for which analytical ground-water modeling has been conducted, the area of contribution shall be determined as follows:

(i) The area of influence shall be determined as specified in subdivision (3) of subsection (h) of this section.

(ii) The area of contribution shall be mapped using the analytical model-generated ground-water level contours as that part of the area of influence that drains directly to the pumping well.

(2) The recharge area for the well field shall be determined using the following methods:

(A) For areas of stratified drift adjacent to the area of contribution where model-generated ground-water level contours are available, the recharge area shall be delineated using those contours; and

(B) For areas of stratified drift and till where model-generated ground-water level contours are not available, the recharge area shall be determined by assuming ground water divides are coincident with surface water divides and that ground water flow directions are normal to the land surface contours, unless better data are available, provided:

(i) topographic maps used for the interpretation of drainage divides representing the boundaries of the recharge area shall have a contour interval no greater than ten feet; and

(ii) watersheds in till areas for perennial streams that discharge into the area of contribution shall be assumed not to contribute ground water to the area of contribution by ground-water flow.

(3) The indirect recharge area shall be determined within a five-mile radius of the area of contribution using topographic maps with a contour interval no greater than ten feet.

(g) **Submission of Final Maps and Reports.**

Each water company shall submit two copies of the maps, reports and computer data listed in subdivisions (g)(1) through (g)(6) of this subsection to the Commissioner for review and written approval.

(1) A map at a scale no less than 1:4,800 (1 inch = 400 feet), on which the following information shall be shown:

(A) all cultural, surface drainage, and transportation features;

(B) the area of influence, if delineated under subparagraph (B) of subdivision (1) of subsection (f) of this section;

(C) the area of contribution within stratified drift;

(D) location of all pumping wells; and

(E) locations of all observation wells, test borings, geophysical surveys, gaging stations, weirs, and streambed piezometer. Locations map be shown on a separate map at scale of 1 inch = 400 feet.

(2) A map at a scale of 1:24,000 (1 inch = 2,000 feet) of the area of contribution, on which the following are shown:

(A) all geologic contacts between unconsolidated materials;

(B) delineation of the area of contribution within stratified drift;

(C) all existing or proposed pumping wells for which the area of contribution is delineated;

(D) recharge areas; and hydraulic boundaries.

(3) All maps used for constructing the flow model including, but not limited to, the following:

(A) finite difference grid or finite element mesh;

(B) model boundary locations;

(C) contours of aquifer bottom; and

(D) horizontal hydraulic conductivity distribution.

(4) A hydrogeologic investigation report which includes, but is not limited to all of the following:

(A) A description of hydrogeologic setting;

(B) A discussion of geologic and hydraulic boundaries and their treatment in the model.

(C) A discussion of the data used in interpretation of hydraulic characteristics including, but not limited to, hydraulic conductivity and storage coefficient or specific yield.

(D) A discussion of recharge to and discharge from the aquifer system including, but not limited to:

(i) recharge from precipitation;

(ii) recharge from underflow;

(iii) recharge from streamflow losses;

(iv) discharge to evapotranspiration;

(v) discharge to underflow;

(vi) discharge to streamflow; and

(vii) discharge to pumpage.

(E) A discussion of and the data relating to ground water and surface water relationships which takes into consideration the following:

(i) streamflow measurements;

(ii) estimated flow duration of streams;

(iii) elevations of top of surface waterbodies; and

(iv) streambed parameters used in the model.

(F) A discussion of calibration and verification procedures and results. Failure to meet any of the proposed calibration or verification goals shall be explained.

(5) Computer storage media deemed acceptable by the commissioner containing the following data:

(A) All input and output generated under subsection (e) of this section including, but not limited to, data for the following:

(i) final calibration runs,

(ii) verification runs, and

(iii) final predictive runs; and

(B) Electronic submission of the area of contribution and recharge areas, formatted in a manner prescribed by the commissioner.

(6) Any other information which the Commissioner deems necessary in order to support the delineation of the area of contribution and the areas of recharge to the well field.

(h) **Analytical Modeling Methods.**

Existing or potential well fields for which the Commissioner has allowed analytical modeling under subparagraph (b) (4) (A) (iv) shall be mapped at Level A in accordance with subdivisions (1) through (5) of this subsection. Unless otherwise specified, below, data shall be collected in accordance with subsection (d) of this section.

(1) Existing data and a plan for data collection and analysis shall be submitted to the Commissioner for review and approval in accordance with the statutory deadlines and shall include:

(A) All information required by subdivisions (b) (1) and (b) (2) of this section;

(B) A detailed plan for conducting aquifer test(s) as required by subdivision (h) (2) of this section;

(C) An identification of the methodology to be utilized to delineate the area of influence. This delineation may be accomplished by the use of an analytical model, as described in subdivision (h) (3) of this section; and

(D) Any other information which the Commissioner deems necessary in order to assure that the proposal for data collection and analysis will result in the accurate delineation of the area of contribution and the areas of recharge to the well field.

(2) Aquifer tests shall be conducted to determine hydraulic properties of the aquifer in accordance with the following:

(A) Pump tests shall be a minimum of 72 hours in duration and meet all requirements of Sections 19-13-B51a through 19-13-B51m of the Regulations of Connecticut State Agencies;

(B) Stream flow characteristics, including, but not limited to, low flow, of any watercourse that can reasonably be expected to be affected by induced infiltration shall be estimated. Field measurements of stage and discharge are not required;

(C) Observation wells shall be installed in sufficient number to measure water table elevations for the construction of water table contour maps; and

(D) Effects of induced infiltration shall be calculated using analytical techniques.

(3) Modeling shall be performed to determine the area of influence. In lieu of use of a digital model, the area of influence may be approximated by the determination of an initial setback area as determined by an analytical model in accordance with the following:

(A) An analytical model used to determine the extent of water table lowering due to pumping shall be fully documented;

(B) The area of influence shall be determined by superimposing the cone of depression upon an estimated configuration of the water table under non-pumping conditions;

(C) The water table configuration for non-pumping conditions shall be estimated using appropriate static water-level data from wells and test borings as well as perennial water bodies that represent water table conditions;

(D) The outer limit of the area of influence shall be determined by the analytical model-predicted water-level drawdown of 0.5 feet within the stratified drift aquifer;

(E) Simulation of the effects of pumping on the water table configuration shall be based on the maximum pumping rates allowable for the well or well field as determined from either the water supply plan, diversion permit or registration, whichever is greatest.

(4) Upon receipt of the Commissioner's written approval of the plan for data collection and analysis, the water company shall conduct the proposed data collection and analyses in accordance with subsection (c) of this section.

(5) Aquifer mapping shall be conducted in accordance with subsection (f) of this section.

(6) Submission of final materials.

(A) Maps and reports shall be submitted in accordance with subdivisions (g) (1) and (g) (2), and subparagraphs (g) (4) (A) through (D) of this section.

(B) The hydrogeologic investigation report submitted pursuant to subparagraph (h) (6) (A) shall also include:

(i) A full description of the analytical technique employed to determine the area of contribution;

(ii) A listing of all data used in analytical models; and

(iii) A listing of all results obtained from analytical modeling.

(C) Floppy diskette(s) containing all programs, input and output generated in subdivision (h) (3) above shall be submitted. The diskette(s) shall be formatted for IBM or compatible microcomputers and the required files shall be in ASCII format.

(i) **Modifications of Level A Mapping.**

If, at any time after written approval of a Level A map under section 22a-354d of the general statutes, a water company becomes aware that hydrogeologic conditions have changed such that a change in the boundaries of an area of contribution or recharge areas on the Level A map can reasonably be expected, or that any information submitted to the Commissioner under this section was not compiled in accordance with this section, was erroneous or any relevant information was omitted, the water company shall, within thirty days of becoming so aware, submit notice of such change, error or omission to the Commissioner. The Commissioner may require a water company to submit a revised Level A map whenever hydrogeologic conditions have changed such that a change in the boundaries of an area of contribution or recharge areas on the Level A map can reasonably be expected, or whenever he finds that any information submitted under this section was not compiled in accordance with this section, was erroneous, was unreliable, any relevant information was omitted, or if, in a case where analytical modeling has been allowed in lieu of numerical modeling under subparagraph (b) (4) (A) (iv) (dd), land use or land use controls change and contamination threats increase. Such mapping shall be performed in accordance with this section, at a time and on a schedule determined by the Commissioner.

(j) **Petition To Amend an Approved Level A Map.**

(1) On or before sixty days after a municipality delineates an aquifer protection area on a local map in accordance with section 22a-354n of the general statutes, any person may petition the Commissioner requesting a change in the boundaries of the area of contribution and recharge areas which are delineated on the corresponding Level A map which was approved by the Commissioner under section 22a-354d of the general statutes.

(2) An owner of land which is located in whole or in part within the boundaries of an aquifer protection area delineated on a local map in accordance with section 22a-354n of the general statutes, may petition the Commissioner requesting a change in the boundaries delineated on the corresponding Level A map.

(3) In making a petition under subdivisions (1) or (2) of this subsection, the petitioner shall have the burden of demonstrating that the approved Level A map was not compiled in accordance with this section or that a material error or omission was made in compiling such map, or that hydrogeologic conditions have changed, and that such changed conditions or the correction of such noncompliance, error or omission can reasonably be expected to result in a specified change in the boundaries of the area of contribution or recharge areas which are delineated on such approved map.

(4) A petition under this subsection shall be submitted in writing on a form prescribed by the Commissioner. The petitioner shall send a copy of such petition by certified mail, return receipt requested, to the water company which submitted the Level A map in question and the chief executive officer and the aquifer protection agency of each municipality which is depicted on such Level A map. The petition shall include but not be limited to a detailed description of the facts and circumstances which give rise to the petition, including a detailed demonstration as required by subdivision (3) of this subsection; the source of all technical information relied upon in the petition; the name, address and signature of the petitioner and the name, address and signature of any representative of the petitioner who participated in compiling technical information relied upon in the petition or preparing the petition; and a certification that a copy of the petition was sent to the water company, chief executive officer(s) and aquifer protection agency(ies), as required by this subsection, on a specified date.

(5) The water company which submitted the Level A map in question, the chief executive officer and the aquifer protection agency of each municipality which is depicted on such Level A map may submit comments on the petition to the Commissioner on or before a date specified by the Commissioner, or if no date is specified by the Commissioner, on or before thirty days after the petition was received by them. The Commissioner may, in his discretion, hold a hearing on the petition, and shall give notice of his decision on the petition to the petitioner, the water company and the chief executive officer and aquifer protection agency of each municipality depicted on the Level A map, briefly stating the reasons for the decision.

(6) An approved Level A map shall not be amended except in accordance with the procedures specified in this section.

(Effective June 21, 1991; amended September 1, 2005)

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Aquifer Protection Areas-Land Use Controls

Sec. 22a-354i-1. Definitions

For the purpose of sections 22a-354i-1 to 22a-354i-10, inclusive, of the Regulations of Connecticut State Agencies, the following definitions apply:

(1) ''Affected water company'' means ''affected water company'' as defined in section 22a-354h of the Connecticut General Statutes;

(2) ''Applicant'' means, as appropriate in context, a person who applies for an exemption under section 22a-354i-6 of the Regulations of Connecticut State Agencies, or a permit under section 22a-354i-8 of the Regulations of Connecticut State Agencies;

(3) ''Application'' means, as appropriate in context, an application for an exemption under section 22a-354i-6 of the Regulations of Connecticut State Agencies, or an application for a permit under section 22a-354i-8 of the Regulations of Connecticut State Agencies;

(4) ''Aquifer protection area'' means ''aquifer protection area'' as defined in section 22a-354h of the Connecticut General Statutes and any extension of such area approved by the Commissioner pursuant to section 22a-354i-4 of the Regulations of Connecticut State Agencies;

(5) ''Area of contribution'' means ''area of contribution'' as defined in section 22a-354h of the Connecticut General Statutes and as mapped in accordance with section 22a-354b-1 of the Regulations of Connecticut State Agencies;

(6) ''Bulk storage facility'' means property where oil or petroleum liquids are received by tank vessel, pipeline, railroad car or tank vehicle for the purpose of storage for wholesale distribution;

(7) ''Certified Hazardous Materials Manager'' means a hazardous materials manager certified by the Institute of Hazardous Materials Managers and who is qualified by reason of relevant specialized training and relevant specialized experience to conduct audits of regulated activities to ensure compliance with applicable law and identify appropriate pollution prevention practices for such activities;

(8) ''Commissioner'' means the Commissioner of Environmental Protection, or his or her agent;

(9) ''Domestic sewage'' means ''domestic sewage'' as defined in section 22a-430-3(a) of the Regulations of Connecticut State Agencies;

(10) ''Facility'' means property where a regulated activity is conducted by any person, including without limitation any buildings located on the property that are owned or leased by that person; and includes contiguous land owned, leased, or for which there is an option to purchase by that person;

(11) ''Floor drain'' means any opening in a floor or surface which opening or surface receives materials spilled or deposited thereon;

(12) ''Hazardous material'' means (A) any hazardous substance as defined in 40 CFR 302.4 and listed therein at Table 302.4, excluding mixtures with a total concentration of less than 1% hazardous substances based on volume, (B) any hazardous waste as defined in section 22a-449(c)-101 of the Regulations of Connecticut State Agencies, (C) any pesticide as defined in section 22a-47 of the Connecticut General Statutes, or (D) any oil or petroleum as defined in section 22a-448 of the Connecticut General Statutes;

(13) ''Hazardous waste'' means ''hazardous waste'' as defined in section 22a-449(c)-101 of the Regulations of Connecticut State Agencies;

(14) ''Industrial laundry'' means a facility for washing clothes, cloth or other fabric used in industrial operations;

(15) ''Infiltration device'' means any discharge device installed below or above the ground surface which device is designed to discharge liquid to the ground;

(16) ''Inland wetland map'' means a map pursuant to section 22a-42a of the Connecticut General Statutes;

(17) ''ISO 14001 environmental management system certification'' means a current ISO 14001 environmental management system certification issued by an ISO 14001 environmental management system registrar that is accredited by the American National Standards Institute and Registrar Accreditation Board;

(18) ''Level A mapping boundary'' means the lines as shown on Level A maps approved or prepared by the Commissioner pursuant to sections 22a-354c, 22a-354d or 22a-354z of the Connecticut General Statutes encompassing the area of contribution and recharge areas;

(19) ''Lubricating oil'' means oil that contains less than 1% chlorinated solvents and is used for the sole purpose of lubricating, cutting, grinding, machining, stamping or quenching metals;

(20) ''Municipal aquifer protection agency'' means the board or commission authorized by the municipality under section 22a-354o of the Connecticut General Statutes;

(21) ''Municipality'' means ''municipality'' as defined in section 22a-354h of the Connecticut General Statutes;

(22) ''Owner'' means the owner or lessee of the facility in question;

(23) ''De-icing chemical'' means sodium chloride, calcium chloride, or calcium magnesium acetate;

(24) ''Person'' means any individual, firm, partnership, association, syndicate, company, trust, corporation, limited liability company, municipality, agency, political or administrative subdivision of the state, federal agencies as permitted by law, or other legal entity of any kind;

(25) ''Pollution'' means ''pollution'' as defined in section 22a-423 of the Connecticut General Statutes;

(26) ''Pollution prevention'' means the use of processes and materials so as to reduce or minimize the amount of hazardous materials used or the quantity and concentration of pollutants in waste generated;

(27) ''Professional engineer'' means a professional engineer licensed in accordance with chapter 391 of the Connecticut General Statutes, and who is qualified by reason of relevant specialized training and relevant specialized experience to conduct audits of regulated activities to ensure compliance with applicable law and identify appropriate pollution prevention practices for such activities;

(28) ''Publicly owned treatment works'' means ''publicly owned treatment works'' as defined in section 22a-430-3 of the Regulations of Connecticut State Agencies;

(29) ''Public service company'' means ''public service company'' as defined in section 16-1 of the Connecticut General Statutes;

(30) ''Public supply well'' means ''public supply well'' as defined in section 19-13-B51b of the Regulations of Connecticut State Agencies;

(31) ''Recharge area'' means ''recharge area'' as defined in section 22a-354h of the Connecticut General Statutes and as mapped in accordance with section 22a-354b-1 of the Regulations of Connecticut State Agencies;

(32) ''Registered regulated activity'' means a regulated activity which has been registered in accordance with section 22a-354i-7 of the Regulations of Connecticut State Agencies, and is conducted at the facility identified in such registration;

(33) ''Registrant'' means a person, who or which, has submitted a registration for a regulated activity in accordance with section 22a-354i-7 of the Regulations of Connecticut State Agencies;

(34) ''Regulated activity'' means any of the following activities, which are located or conducted, wholly or partially, in an aquifer protection area, except as provided for in sections 22a-354i-5(c) and 22a-354i-6 of the Regulations of Connecticut State Agencies:

(A) underground storage or transmission of oil or petroleum, to the extent such activity is not pre-empted by federal law, or hazardous material, except for (i) an underground storage tank that contains number two (2) fuel oil and is located more than five hundred (500) feet from a public supply well subject to regulation under section 22a-354c or section 22a-354z of the Connecticut General Statutes, or (ii) underground electrical facilities such as transformers, breakers, or cables containing oil for cooling or insulation purposes which are owned and operated by a public service company,

(B) oil or petroleum dispensing for the purpose of retail, wholesale or fleet use,

(C) on-site storage of hazardous materials for the purpose of wholesale sale,

(D) repair or maintenance of vehicles or internal combustion engines of vehicles, involving the use, storage or disposal of hazardous materials, including solvents, lubricants, paints, brake fluids, transmission fluids or the generation of hazardous wastes,

(E) salvage operations of metal or vehicle parts,

(F) wastewater discharges to ground water other than domestic sewage and stormwater, except for discharges from the following that have received a permit issued by the Commissioner pursuant to section 22a-430 of the Connecticut General Statutes: (i) a pump and treat system for ground water remediation, (ii) a potable water treatment system, (iii) heat pump system, (iv) non-contact cooling water system, or (v) swimming pools,

(G) car or truck washing, unless all waste waters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,

(H) production or refining of chemicals, including without limitation hazardous materials or asphalt,

(I) clothes or cloth cleaning service which involves the use, storage or disposal of hazardous materials including without limitation dry-cleaning solvents,

(J) industrial laundry service which involves the cleaning of clothes or cloth contaminated by hazardous material, unless all waste waters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,

(K) generation of electrical power by means of fossil fuels, except for (i) generation of electrical power by an emergency engine as defined by section 22a-174-22(a)(3) of the Regulations of Connecticut State Agencies, or (ii) generation of electrical power by means of natural gas or propane,

(L) production of electronic boards, electrical components, or other electrical equipment involving the use, storage or disposal of any hazardous material or involving metal plating, degreasing of parts or equipment, or etching operations,

(M) embalming or crematory services which involve the use, storage or disposal of hazardous material, unless all waste waters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,

(N) furniture stripping operations which involve the use, storage or disposal of hazardous materials,

(O) furniture finishing operations which involve the use, storage or disposal of hazardous materials, unless all waste waters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,

(P) storage, treatment or disposal of hazardous waste subject to a permit under sections 22a-449(c)-100 to 22a-449(c)-110, inclusive, of the Regulations of Connecticut State Agencies,

(Q) biological or chemical testing, analysis or research which involves the use, storage or disposal of hazardous material, unless all waste waters from such activity are lawfully disposed of through a connection to a publicly owned treatment works, and provided that on-site testing of a public supply well by a public water utility is not a regulated activity,

(R) pest control services which involve storage, mixing or loading of pesticides or other hazardous materials,

(S) photographic finishing which involves the use, storage or disposal of hazardous materials, unless all waste water from such activity are lawfully disposed of through a connection to a publicly owned treatment works,

(T) production or fabrication of metal products which involves the use, storage or disposal of hazardous materials including (i) metal cleaning or degreasing with industrial solvents, (ii) metal plating, or (iii) metal etching,

(U) printing, plate making, lithography, photoengraving, or gravure, which involves the use, storage or disposal of hazardous materials,

(V) accumulation or storage of waste oil, anti-freeze or spent lead-acid batteries which are subject to a general permit issued under sections 22a-208(i) and 22a-454(e)(1) of the Connecticut General Statutes,

(W) production of rubber, resin cements, elastomers or plastic, which involves the use, storage or disposal of hazardous materials,

(X) storage of de-icing chemicals, unless such storage takes place within a weather-tight water-proof structure for the purpose of retail sale or for the purpose of de-icing parking areas or access roads to parking areas,

(Y) accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer or composting of solid waste which is subject to a permit issued by the Commissioner pursuant to sections 22a-207b, 22a-208a, and 22a-208c of the Connecticut General Statutes, except for a potable water treatment sludge disposal area,

(Z) dying, coating or printing of textiles, or tanning or finishing of leather, which activity involves the use, storage or disposal of hazardous materials,

(AA) production of wood veneer, plywood, reconstituted wood or pressure-treated wood, which involves the use, storage or disposal of hazardous material, and

(BB) pulp production processes that involve bleaching;

(35) ''Release'' means ''release'' as defined in section 22a-133k-1 of the Regulations of Connecticut State Agencies;

(36) ''State aquifer protection regulations'' means sections 22a-354i-1 to 22a-354i-10, inclusive, of the Regulations of Connecticut State Agencies;

(37) ''Storage'' means the holding or possession of any hazardous material;

(38) ''Storage tank'' means a stationary device which is designed to store hazardous materials, and is constructed of non-earthen materials including without limitation concrete, steel, fiberglass or plastic;

(39) ''Topographic feature'' means an object, whether natural or man-made, located on the earth surface and of sufficient size that it appears on a 1:24,000 scale topographic quadrangle map drawn by the United States Geological Survey;

(40) ''Underground'' when referring to a storage tank or storage tank component means that ten percent or more of the volumetric capacity of such tank or component is below the surface of the ground and that portion which is below the surface of the ground is not fully visible for inspection;

(41) ''Vehicle'' or ''vehicles'' means a ''vessel'' as defined by section 15-170 of the Connecticut General Statutes, and any vehicle propelled or drawn by any non-muscular power, including without limitation an automobile, aircraft, all-terrain vehicle or snowmobile;

(42) ''Waters'' means ''waters'' as defined in section 22a-423 of the Connecticut General Statutes;

(43) ''Well field'' means ''well field'' as defined in section 22a-354h of the Connecticut General Statutes; and

(44) ''Zoning district map'' means any map showing zoning districts prepared in accordance with maps adopted pursuant to section 8-3 of the Connecticut General Statutes.

(Adopted effective February 2, 2004)

Sec. 22a-354i-2. Delineation of aquifer protection area boundaries

(a) The municipal zoning, planning, or planning and zoning commission shall complete the following not later than one hundred twenty (120) days after being notified by the Commissioner that one or more level A mapping boundaries are located entirely or partially within such municipality:

(1) Delineate such boundaries on the municipal zoning map adopted pursuant to section 8-3 of the Connecticut General Statutes, or on the municipal inland wetlands and watercourses map adopted pursuant to section 22a-42a of the Connecticut General Statutes if such zoning map does not exist;

(2) designate such delineated areas as aquifer protection areas; and

(3) publish notice of such delineation in a newspaper having substantial circulation in the area of such delineation.

(b) The notice required by subsection (a)(3) of this section shall include at least the following:

(1) A map or a detailed description of the subject aquifer protection area; and

(2) the name, address, and telephone number of a representative of the municipal aquifer protection agency who may be contacted for further information.

(c) No later than one hundred twenty (120) days after receiving notification from the Commissioner that an aquifer protection area boundary has been amended in accordance with section 22a-354b-1(i) or 22a-354b-1(j) of the Regulations of Connecticut State Agencies, each municipality affected by the amended boundary shall amend such municipal zoning district map or inland wetland map to reflect such amended boundary.

(Adopted effective February 2, 2004)

Sec. 22a-354i-3. Adoption of municipal regulations; commissioner's approval

(a) Not later than six (6) months after a municipality receives notice from the Commissioner that a level A mapping boundary is located in such municipality, the municipal aquifer protection agency thereof shall adopt regulations pursuant to section 22a-354p of the Connecticut General Statutes.

(b) The Commissioner shall submit written notification of approval or disapproval of such regulations to the municipal aquifer protection agency pursuant to section 22a-354p(f) of the Connecticut General Statutes. If the Commissioner disapproves a municipal regulation, the municipal aquifer protection agency shall, not later than

ninety (90) days after such disapproval, adopt and submit a revision that corrects and addresses the deficiencies identified by the Commissioner. The Commissioner shall consider such revised regulation in the same manner he considers a regulation submitted under this section.

(c) Once a regulation becomes effective pursuant to section 22a-354p(f) of the Connecticut General Statutes, any amendments thereto shall only become effective when the Commissioner determines, in writing, that the amended regulation is reasonably related to ground water protection and is not inconsistent with the state aquifer protection regulations.

(Adopted effective February 2, 2004)

Sec. 22a-354i-4. Extension of aquifer protection area boundaries for administrative purposes; approval

(a) A municipal aquifer protection agency may submit a written request to the Commissioner to extend an aquifer protection area boundary adopted under section 22a-354i-2 of the Regulations of Connecticut State Agencies to coincide with the nearest property line, municipal boundary or topographic feature. Such proposed extension shall, at a minimum, fully encompass the aquifer protection areas bounded by the approved level A mapping but shall not exceed the distance necessary to clarify the location of the aquifer protection area or to facilitate the administration of regulations pertaining thereto. An aquifer protection area boundary may not be extended without prior written approval of the Commissioner.

(b) Any request by a municipal aquifer protection agency to the Commissioner for extension of an aquifer protection area boundary under subsection (a) of this section shall include at least the following:

(1) A map to scale delineating (A) the level A mapping boundary proposed to be extended within such municipality, and (B) the proposed extension of the aquifer protection area boundary;

(2) a certification by the chairperson of the requesting municipal aquifer protection agency that such agency has provided notice of such request to all owners of property within the proposed extended aquifer protection area and all affected water companies in accordance with the following:

(A) Such notice shall include at least the following:

(i) A map showing the aquifer protection area boundaries and the proposed extension of such boundaries,

(ii) the name, address, and telephone number of a representative of the municipal aquifer protection agency who may be contacted for further information, and

(iii) a statement that any person may, not later than thirty (30) days after said notification, submit to the municipal aquifer protection agency written comments on such proposed boundary extension;

(B) Such notice shall be effectuated by the following:

(i) Delivery of notice by certified mail to those individuals and entities identified in subdivision (2) of this subsection, or

(ii) the publication of a notice in a newspaper having substantial circulation in the affected area; and posting of notice near the proposed boundaries of the subject aquifer protection area of at least four signs each of which must be at least four square feet in size; and

(3) a summary of all comments received by such agency regarding the proposed extension and its response to each comment.

(c) Not later than sixty (60) days after receiving the Commissioner's written approval of a request to extend an aquifer protection area boundary, the requesting

municipal aquifer protection agency shall delineate such extended boundary on the municipal zoning district or inland wetland map identified in section 22a-354i-2 of the Regulations of Connecticut State Agencies and shall designate such delineated area as an aquifer protection area.

(Adopted effective February 2, 2004)

Sec. 22a-354i-5. Prohibited and regulated activities

(a) All regulated activities are prohibited in aquifer protection areas, except as specified in subsection (b) of this section.

(b) The following regulated activities are not prohibited in aquifer protection areas:

(1) A registered regulated activity which is conducted in compliance with section 22a-354i-9 of the Regulations of Connecticut State Agencies; and

(2) a regulated activity which has received a permit issued pursuant to section 22a-354i-8 of the Regulations of Connecticut State Agencies.

(c) The following are not regulated activities:

(1) Any activity conducted at a residence without compensation;

(2) any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time;

(3) any agricultural activity regulated pursuant to section 22a-354m(d) of the Connecticut General Statutes;

(4) any activity provided all the following conditions are satisfied:

(A) such activity takes place solely within an enclosed building in an area with an impermeable floor,

(B) such activity involves no more than 10% of the floor area in the building where the activity takes place,

(C) any hazardous material used in connection with such activity is stored in such building at all times,

(D) all waste waters generated by such activity are lawfully disposed through a connection to a publicly owned treatment works, and

(E) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than one hundred and ten (110) gallons of hazardous materials;

(5) any activity solely involving the use of lubricating oil provided all the following conditions are satisfied:

(A) such activity does not involve cleaning of metals with chlorinated solvents at the facility,

(B) such activity takes place solely within an enclosed building in an area with an impermeable floor,

(C) any hazardous material used in connection with such activity is stored in such building at all times, and

(D) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than 110 gallons of such lubricating oil and associated hazardous waste; and

(6) any activity involving the dispensing of oil or petroleum from an above-ground storage tank or tanks with an aggregate volume of 2000 gallons or less provided all the following conditions are satisfied:

(A) such dispensing activity takes place solely on a paved surface which is covered by a roof,

(B) the above-ground storage tank (or tanks) is a double-walled tank with overfill alarms, and

(C) all associated piping is either above ground, or has secondary containment.

(Adopted effective February 2, 2004)

Sec. 22a-354i-6. Application for an exemption from prohibition or regulation

(a) The Commissioner may, after the receipt of an application in accordance with the provisions of this section, exempt a regulated activity from the state aquifer protection regulations if he determines that such activity does not and will not pose a threat to any public supply well subject to regulation under section 22a-354c or 22a-354z of the Connecticut General Statutes. An exemption shall not be granted unless the owner of such activity clearly and convincingly demonstrates and the Commissioner finds that, if any hazardous material is released into the ground from the subject regulated activity, treatment would not be required to render the ground water suitable for drinking. Any exemption granted by the Commissioner shall be in writing, shall explicitly state the findings upon which the exemption was granted, and shall provide for the terms of such exemption.

(b) An applicant for an exemption under subsection (a) of this section shall submit an application therefor to the Commissioner on a form prescribed by him, and shall concurrently submit a copy of such application to the municipal aquifer protection agency, any affected water company and the Commissioner of Public Health. The application shall include at least the following:

(1) A map showing the location of the subject regulated activity plotted on a 1:24,000 scale United States Geological Survey topographic quadrangle base;

(2) a description of the purpose and nature of the subject regulated activity, and any associated processes;

(3) a description of the chemical composition of the hazardous material and means of disposal of any waste, including waste water, generated or to be generated in connection with the subject regulated activity;

(4) a map showing the location of all points of any waste water discharged or to be discharged to waters of the state, plotted on a 1:24,000 scale United States Geological Survey topographic quadrangle base, and if the discharge points are of a density such that they may not be clearly shown at the scale of 1:24,000, an enlargement of that area showing the discharge points shall be provided;

(5) a written demonstration that any hazardous material released into the ground from the subject regulated activity would not render the ground water unsuitable for drinking without treatment;

(6) any other information that the Commissioner reasonably deems necessary to determine whether the subject regulated activity poses or may pose a threat to the ground water; and

(7) the following certification by the applicant and a certified hazardous materials manager or a professional engineer signed after satisfying the statements set forth in the following certification:

‘‘I have personally examined and am familiar with the information submitted in this exemption application and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the

submitted information is punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law.''

(c) A municipal aquifer protection agency, any affected water company or the Commissioner of Public Health may, not later than sixty (60) days after receiving a copy of an application for exemption under this section, submit to the Commissioner written comments on such application. The Commissioner shall give due consideration to any such comments.

(d) The Commissioner shall send a notice by certified mail to the applicant of his approval or denial of an exemption application and a copy of the notice to the Commissioner of the Department of Public Health, the affected water company and the municipal aquifer protection agency.

(e) If the Commissioner denies an application for an exemption for a regulated activity, such regulated activity is prohibited unless such activity can be registered pursuant to section 22a-354i-7 of the Regulations of Connecticut State Agencies. Any such registration shall be made not later than thirty (30) days after receipt of the Commissioner's written disapproval of the exemption. The Commissioner shall send notice of said disapproval by certified mail.

(Adopted effective February 2, 2004)

Sec. 22a-354i-7. Registration of regulated activities

(a) The Commissioner shall process registrations for those regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes. The municipal aquifer protection agency shall process registrations for all other regulated activities.

(b) Any person engaged in a regulated activity which substantially commenced, or was in active operation within the past five (5) years, or with respect to which a municipal building permit was issued, either (A) before the effective date of the state aquifer protection regulations, or (B) before the date an applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map, whichever occurs later, shall register the activity on a form prescribed by the Commissioner in accordance with this section unless such person has pending an application for an exemption pursuant to section 22a-354i-6 of the Regulations of Connecticut State Agencies.

(1) If the regulated activity is specified in section 22a-354p(g) of the Connecticut General Statutes, the person engaged in such activity shall submit a registration to the Commissioner not later than one hundred eighty (180) days, unless otherwise authorized in writing by the commissioner, after adoption of regulations pursuant to section 22a-354p of the Connecticut General Statutes; or the designation the aquifer protection area pursuant to section 22a-354i-2 of the Regulations of Connecticut State Agencies, whichever occurs later. Said person shall simultaneously file a copy of the registration with the municipal aquifer protection agency, Commissioner of Public Health and the affected water company.

(2) If the regulated activity is not specified in section 22a-354p(g) of the Connecticut General Statutes, the person engaged in such activity shall submit a registration to the municipal aquifer protection agency not later than one hundred eighty (180) days, unless otherwise authorized in writing by the commissioner, after adoption of regulations pursuant to section 22a-354p of the Connecticut General Statutes; or the designation the aquifer protection area pursuant to section 22a-354i-2 of the Regulations of Connecticut State Agencies; whichever occurs later. Said person shall simultaneously file a copy of the registration with the Commissioner, Commissioner of Public Health and the affected water company.

(c) A registration shall include the following:

(1) The name, business telephone number, street address and mailing address of the:

(A) Registrant; if the registrant is a corporation or limited partnership, the full name of the facility and such corporation or limited partnership as registered with the Connecticut Secretary of State, and any officer or governing or managing body of any partnership, association, firm or corporation,

(B) owner of such facility if different than the registrant, and

(C) manager or operator overseeing the operations of such facility;

(2) the location of such facility, using street address or other appropriate method of location, and a map showing the property boundaries of the facility on a 1:24,000 scale United States Geological Survey topographic quadrangle base;

(3) an identification of the regulated activity or activities conducted at the facility, as described in section 22a-354i-1(34) of the Regulations of Connecticut State Agencies, which regulated activity or activities shall consist of any regulated activity which substantially commenced, was in active operation, or with respect to which a municipal building permit was issued within the past five years; and

(4) a certification by the registrant that the subject regulated activity is in compliance with the best management practices set forth in section 22a-354i-9(a) of the Regulations of Connecticut State Agencies, as follows, signed after satisfying the statements set forth in the following certification:

''I have personally examined and am familiar with the information submitted in this registration and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in this document or certification may be punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law.''

(d) When deemed necessary to protect a public supply well subject to regulation under section 22a-354c or section 22a-354z of the Connecticut General Statutes, the Commissioner or the municipal aquifer protection agency, as appropriate, may:

(1) require, by written notice, any registrant to submit for review and written approval a storm water management plan in accordance with section 22a-354i-9(b) of the Regulations of Connecticut State Agencies; if so required, the storm water management plan shall be implemented immediately upon its approval; or

(2) require, by written notice, any registrant to submit for review and written approval the materials management plan prepared in accordance with 22a-354i-9(a)(5) of the Regulations of Connecticut State Agencies; if so required, the materials management plan shall be implemented immediately upon its approval.

(e) General provisions in the issuance of all registrations are as follows:

(1) The Commissioner or municipal aquifer protection agency, as appropriate, has relied in whole or in part on information provided by the registrant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the registration may be modified, suspended or revoked;

(2) all registrations issued by the Commissioner or municipal aquifer protection agency, as appropriate, are subject to and do not derogate any present or future rights or powers of the Commissioner, municipal aquifer protection agency, or municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity;

(3) a complete registration shall expire five (5) years from the date of receipt of such registration by the Commissioner or municipal aquifer protection agency, as appropriate; and

(4) the registrant shall apply to the Commissioner or municipal aquifer protection agency, as appropriate, to renew the registration on a form prescribed by the Commissioner for a facility prior to expiration of such registration. If a registered regulated activity is out of business or inactive when registration renewal is required, a five (5) year allowance shall be in effect from the date the registration expires. If the registrant has not applied to renew the registration within five (5) years of the date the registration expires, the facility is no longer eligible for registration.

(f) If a regulated activity which is eligible for registration in accordance with subsection (b) of this section fails to be registered or if the registrant of an active registered activity fails to apply for renewal prior to expiration, the Commissioner or municipal aquifer protection agency, as appropriate, may accept a late registration at their discretion, subject to the limitations in subsection (e)(4) of this section.

(g) The registrant may apply to transfer the registration for a facility. Such application for transfer shall be made to the commissioner or municipal aquifer protection agency, as appropriate.

(1) A registration for regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes, may be transferred by the Commissioner. Such transfer shall be executed in conformance with sections 22a-6o and 22a-6m of the Connecticut General Statutes using a form prescribed by the Commissioner.

(2) A registration for regulated activities not specified in section 22a-354p(g) of the Connecticut General Statutes may be transferred by the municipal aquifer protection agency. Such transfer shall be executed using a form prescribed by the Commissioner and submitted to the municipal aquifer protection agency.

(h) If the Commissioner, or the municipal aquifer protection agency, as appropriate, determines that a registration submitted in accordance with subsection (b), (e) or (f) of this section is incomplete, the Commissioner or the municipal aquifer protection agency shall reject the registration and notify the registrant of what additional information is needed and the date by which it must be submitted. If the registration submitted in accordance with subsection (b), (e) or (f) of this section is determined to be complete and the regulated activity is eligible for registration, the commissioner or municipal aquifer protection agency, as appropriate, shall send written notification of such registration to the registrant. Such registration shall be determined to be complete and eligible if the registrant has not otherwise received a notice of rejection or notice that the regulated activity is not eligible for registration from the Commissioner, or the municipal aquifer protection agency, as appropriate, not later than one hundred eighty (180) days after the date the registration is received by the Commissioner or municipal aquifer protection agency, as appropriate.

(Adopted effective February 2, 2004)

Sec. 22a-354i-8. Permit requirements

(a) Any person may apply for a permit to add a regulated activity to a facility where a registered regulated activity occurs.

(b) The Commissioner shall process permit applications for those regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes. The municipal aquifer protection agency shall process permit applications for all other regulated activities.

(c) An application for a permit shall be made on a form prescribed by the Commissioner. Simultaneously with filing an application, the applicant shall send

a copy of the application to the Commissioner or municipal aquifer protection agency, as appropriate, the Commissioner of Public Health and the affected water company. An application shall include the following information:

(1) The information as required for a registration under section 22a-354i-7(c) of the Regulations of Connecticut State Agencies shall be provided for the proposed regulated activity;

(2) a confirmation and commitment that all regulated activities at the facility shall:

(A) be and remain in compliance with section 22a-354i-9(a) of the Regulations of Connecticut State Agencies,

(B) not increase the number of underground storage tanks used for storage of hazardous materials, and

(C) be in and remain in compliance with all local, state, and federal environmental laws;

(3) a materials management plan prepared in accordance with section 22a-354i-9(a)(5) of the Regulations of Connecticut State Agencies;

(4) a storm water management plan in accordance with section 22a-354i-9(b) of the Regulations of Connecticut State Agencies;

(5) the following environmental compliance information with respect to environmental violations which occurred at the facility where the regulated activities are conducted, within the five years immediately preceding the date of the application:

(A) any criminal conviction involving a violation of any environmental protection law,

(B) any civil penalty imposed in any state or federal judicial proceeding, or any penalty exceeding five thousand dollars imposed in any administrative proceeding, and

(C) any judicial or administrative orders issued regarding any such violation together with the dates, case or docket numbers, or other information which identifies the proceeding. For any such proceeding initiated by the state or federal government, the Commissioner, or municipal aquifer protection agency as appropriate, may require submission of a copy of any official document associated with the proceeding, the final judgment or order;

(6) for regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes, the compliance information required by subdivision (5) of this subsection is in addition to any information that the Commissioner may require pursuant to section 22a-6m of the Connecticut General Statutes;

(7) any additional information deemed necessary, by the Commissioner or municipal aquifer protection agency as appropriate, regarding potential threats to the ground water and proposed safeguards; and

(8) the following certification signed by the applicant and the individual responsible for preparing the application, after satisfying the statements set forth in the certification:

''I have personally examined and am familiar with the information submitted in this document and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law.''

(d) A municipal aquifer protection agency, the Commissioner, any affected water company or the Commissioner of Public Health may, not later than sixty (60) days

after receiving a copy of an application for a permit under this section, submit to the Commissioner or municipal aquifer protection agency, as appropriate, written comments on such application. The Commissioner or municipal aquifer protection agency, as appropriate, shall give due consideration to any such comments, and shall provide a copy of the decision to the Commissioner or municipal aquifer protection agency, as appropriate, the affected water company and the Commissioner of Public Health.

(e) The Commissioner or municipal aquifer protection agency, as appropriate, shall not issue a permit unless a complete application has been received and the applicant demonstrates, to the Commissioner's or municipal aquifer protection agency's satisfaction, as appropriate, that all applicable requirements of this section have been satisfied and all of the following standards and criteria have been met:

(1) The proposed regulated activity shall take place at a facility where a registered regulated activity occurs;

(2) the proposed regulated activity shall not increase the number or storage capacity of underground storage tanks used for hazardous materials except for the replacement of an existing underground storage tank in accordance with section 22a-354i-9(a)(3) of the Regulations of Connecticut State Agencies;

(3) the materials management plan and storm water management plan have been satisfactorily prepared in accordance with sections 22a-354i-9(a)(5) and 22a-354i-9(b), respectively, of the Regulations of Connecticut State Agencies;

(4) the applicant has submitted a confirmation and commitment that all regulated activities shall be and remain in compliance with all local, state and federal environmental laws in accordance with subsection (c)(2)(C) of this section;

(5) the applicant's compliance record shall not indicate (A) that any noncompliance resulted from indifference to or disregard for the legal requirements, (B) an unwillingness or inability to devote the resources necessary to comply and remain in compliance, or (C) that instances of noncompliance have led to serious environmental harm, harm to human health or safety, or a substantial risk of such harm;

(6) the proposed regulated activity shall be conducted in accordance with section 22a-354i-9 of the Regulations of Connecticut State Agencies;

(7) the registered regulated activity is being conducted in accordance with section 22a-354i-9 of the Regulations of Connecticut State Agencies; and

(8) the certification required under subsection (c)(8) of this section has been signed by the applicant and the individual responsible for preparing the application.

(f) The Commissioner or municipal aquifer protection agency, as appropriate, may impose reasonable conditions or limitations on any permit issued under this section to assure protection of the ground water, including but not limited to the following:

(1) Best management practices in addition to those set forth in section 22a-354i-9 of the Regulations of Connecticut State Agencies; and

(2) ground water monitoring.

(g) General provisions in the issuance of all permits are as follows:

(1) The Commissioner or municipal aquifer protection agency, as appropriate, has relied in whole or in part on information provided by the applicant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the permit may be modified, suspended or revoked;

(2) all permits issued by the Commissioner or municipal aquifer protection agency, as appropriate, are subject to and do not derogate any present or future rights or powers of the Commissioner, municipal aquifer protection agency, or municipality,

and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity; and

(3) the permit shall expire ten (10) years from the date of issuance of such permit by the Commissioner or municipal aquifer protection agency, as appropriate.

(4) A person shall apply to the Commissioner or municipal aquifer protection agency, as appropriate, to renew the permit on a form prescribed by the Commissioner prior to expiration of such permit. Such renewal shall be granted upon request by the Commissioner or municipal aquifer protection agency, as appropriate, unless a substantial change in the permitted activity has been made, or enforcement action with regard to the regulated activity has been taken, in which case, a new permit application shall be submitted and reviewed in accordance with the provisions of this section of the Regulations of Connecticut State Agencies.

(h) A person may request a modification of a permit from the Commissioner or municipal aquifer protection agency, as appropriate. Such request shall be on a form prescribed by the Commissioner, and shall include the facts and reasons supporting the request. The Commissioner or municipal aquifer protection agency, as appropriate, may require the applicant to submit a new application for a permit or renewal in lieu of a modification request.

(i) A person may apply to transfer the permit for a facility. Such application for transfer shall be made to the Commissioner or municipal aquifer protection agency, as appropriate.

(1) A permit for regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes, may be transferred by the Commissioner. Such transfer shall be executed in conformance with sections 22a-6o and 22a-6m of the Connecticut General Statutes using a form prescribed by the Commissioner.

(2) A permit for regulated activities not specified in section 22a-354p(g) of the Connecticut General Statutes may be transferred by the municipal aquifer protection agency. Such transfer shall be executed using a form prescribed by the Commissioner and submitted to the municipal aquifer protection agency.

(Adopted effective February 2, 2004)

Sec. 22a-354i-9. Best management practices for regulated activities

(a) Every regulated activity shall be conducted in accordance with the following:

(1) Hazardous materials may be stored above ground within an aquifer protection area only in accordance with the following conditions:

(A) hazardous material shall be stored in a building or under a roof that minimizes storm water entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility as defined in section 22a-354i-1(6) of the Regulations of Connecticut State Agencies,

(B) floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material,

(C) a structure which may be used for storage or transfer of hazardous material shall be protected from storm water run-on, and ground water intrusion,

(D) hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area,

(E) hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances,

(F) hazardous material shall be stored only in a container that has been certified by a state or federal agency or the American Society of Testing Materials as suitable for the transport or storage of such material,

(G) hazardous material shall be stored only in an area that is secured against unauthorized entry by the public, and

(H) the requirements of this subdivision are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law, including applicable requirements of the Resource Conservation and Recovery Act of 1976, as amended;

(2) no person shall increase the number of underground storage tanks used to store hazardous materials;

(3) an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless (A) there is no more than a 25% increase in volume of the larger replacement tank, and (B) the larger replacement tank is a double-walled tank with co-axial piping, both meeting new installation component standards pursuant to 22a-449(d)-1(e) and 22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring;

(4) no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of waste waters to the ground, unless such release is permitted by the Commissioner in accordance with sections 22a-430 or 22a-430b of the Connecticut General Statutes; and

(5) a materials management plan shall be developed and implemented in accordance with the following:

(A) A materials management plan shall contain, at a minimum, the following information with respect to the subject regulated activity:

(i) A pollution prevention assessment consisting of a detailed evaluation of alternatives to the use of hazardous materials or processes and practices that would reduce or eliminate the use of hazardous materials, and implementation of such alternatives where possible and feasible,

(ii) a description of any operations or practices which may pose a threat of pollution to the aquifer, which shall include the following:

(a) a process flow diagram identifying where hazardous materials are stored, disposed and used, and where hazardous wastes are generated and subsequently stored and disposed,

(b) an inventory of all hazardous materials which are likely to be or will be manufactured, produced, stored, utilized or otherwise handled, and

(c) a description of waste, including waste waters generated, and a description of how such wastes are handled, stored and disposed,

(iii) the name, street address, mailing address, title and telephone number of the individual(s) responsible for implementing the materials management plan and the individual(s) who should be contacted in an emergency,

(iv) a record-keeping system to account for the types, quantities, and disposition of hazardous materials which are manufactured, produced, utilized, stored, or otherwise handled or which are discharged or emitted; such record-keeping system shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection agency, and

(v) an emergency response plan for responding to a release of hazardous materials. Such plan shall describe how each such release could result in pollution to the underlying aquifer and shall set forth the methods used or to be used to prevent and abate any such a release;

(B) when a materials management plan is required under either section 22a-354i-7(d) or 22a-354i-8(c), such materials management plan shall be completed and certified by a professional engineer or a certified hazardous materials manager, or, if the facility where the regulated activity is conducted has received and maintained an ISO 14001 environmental management system certification, then the registrant may complete and certify the materials management plan; and

(C) the materials management plan shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection agency.

(b) The development and implementation of a storm water management plan shall be required for regulated activities in accordance with sections 22a-354i-7(d) and 22a-354i-8(c) of the Regulations of Connecticut State Agencies, as follows:

(1) A storm water management plan shall assure that storm water run-off generated by the subject regulated activity is (i) managed in a manner so as to prevent pollution of ground water, and (ii) shall comply with all of the requirements for the General Permit of the Discharge of Storm Water associated with a Commercial Activity issued pursuant to section 22a-430b of the Connecticut General Statutes; and

(2) upon approval by the Commissioner or the municipal aquifer protection agency, as appropriate, the storm water management plan shall be enforceable by the Commissioner or such agency, as appropriate.

(Adopted effective February 2, 2004)

Sec. 22a-354i-10. Other state, federal and local laws

Nothing in any exemption issued under section 22a-354i-6 of the Regulations of Connecticut State Agencies, any registration submitted under section 22a-354i-7 of the Regulations of Connecticut State Agencies, or any regulated activity permitted under section 22a-354i-8 of the Regulations of Connecticut State Agencies shall relieve any person of any other obligations under any local, state, or federal law.

(Adopted effective February 2, 2004)

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Water Diversion

Sec. 22a-377 (b)-1. Exemptions from the Connecticut water diversion policy act

(a) In addition to those diversions exempted in section 22a-377 of the General Statutes, and subject to the conditions set out in subsection (b) of this section, the following diversions are exempt from the provisions of sections 22a-365 to 22a-378, inclusive, of the General Statutes:

(1) Diversion of surface waters caused by activities which are incidental to construction, including but not limited to dredging or filling for site development, stream bank stabilization, erosion and sedimentation control, construction or use of coffer dams, and dewatering of below grade structures, provided:

(A) there is no permanent change in the location of the natural bed of any perennial brook, stream or river;

(B) no perennial brook, stream or river is channelized;

(C) the diversion structure allows the continuous passage of existing watercourses; and

(D) any permit or approval required by sections 22a-32, 22a-39, 22a-42a or 22a-361 of the General Statutes is obtained.

(2) Diversion of water incidental to testing the production capability of a well or the quality of water withdrawn therefrom, provided the diversion continues no longer than is necessary for testing the production capability of the well or the quality of water withdrawn therefrom.

(3) Withdrawal of groundwater from a well which is constructed in the vicinity of a failed well to replace the failed well, provided:

(A) the failed well was registered or permitted pursuant to sections 22a-365 to 22a-378, inclusive, of the General Statutes;

(B) the failed well is permanently plugged and abandoned; and

(C) the replacement well is located no further than 250 feet from the failed well.

(4) Diversion of water incidental to the inspection, maintenance, or repair of existing diversion structures and related facilities, provided:

(A) the diversion continues no longer than is necessary to carry out inspection, maintenance, or repair work;

(B) such existing diversion structures and related facilities were registered or permitted pursuant to sections 22a-365 to 22a-378, inclusive, of the General Statutes; and

(C) the surface elevation of any pond, lake, or reservoir, whether natural or artificial, is not drawn down except as may be authorized by subdivision 16 of this subsection.

(5) Diversion of water, or increase in the capacity to divert water, incidental to providing water treatment, extending distribution mains, or maintaining or expanding service within a service area, provided the quantity of water withdrawn from any source does not exceed the quantity authorized pursuant to any applicable permit or registration issued or filed under section 22a-368 of the General Statutes.

(6) Transfer of up to 50,000 gallons of water in any twenty-four hour period from one distribution system or service area to another distribution system or service area, or installation of capacity to transfer such water, provided the quantity of water withdrawn from any source does not exceed the quantity authorized pursuant to any applicable permit or registration issued or filed under section 22a-368 of the General Statutes.

(7) As used in subdivisions (5) and (6) of this subsection, ''service area'' means a service area identified in any applicable permit or registration issued or filed under section 22a-368 of the General Statutes or an exclusive service area established under section 25-33g of the General Statutes.

(8) Diversion of tidal water incidental to navigation improvements, dredging, or the construction of jetties, groins, piers, or similar structures, provided that the permit or approval required for such activity by sections 22a-32 or 22a-361 of the General Statutes is obtained.

(9) Diversion of water resulting from separation of combined storm water and sanitary sewer systems approved by the Commissioner pursuant to chapter 446k of the General Statutes, except when such diversion results in an interbasin transfer of surface water run-off from an area of 100 or more acres.

(10) Diversion of water incidental to the placement of an obstruction or encroachment within stream channel encroachment lines established pursuant to sections 22a-342 to 22a-348, inclusive, of the General Statutes, provided:

(A) the permit required by section 22a-342 of the General Statutes is obtained;

(B) the obstruction or encroachment allows the continuous passage of the watercourse for which such stream encroachment lines were established;

(C) no watercourse is dammed, diked, or channelized as a result of such diversion; and

(D) if such obstruction or encroachment is on or in a tributary to the watercourse for which such stream channel encroachment lines have been established, the total drainage area of the tributary does not exceed five square miles.

(11) Diversion of water authorized by the Commissioner pursuant to section 316 of the Federal Clean Water Act, 33 U.S.C. sections 1251 *et seq.*

(12) Diversion of water in a manner and degree which is specified by order of the Commissioner for the abatement of pollution pursuant to sections 22a-133e, 22a-424, 22a-428, 22a-430, 22a-431, 22a-432, 22a-449, or 22a-451 of the General Statutes, or as specified in approved plans submitted pursuant to such an order.

(13) Alteration of watercourses and collection or impoundment of water runoff in an area which has a tributary watershed of less than 100 acres, provided that any permit or approval required by sections 22a-32, 22a-39, 22a-42a, 22a-342, 22a-401 or 22a-403 of the General Statutes is obtained.

(14) Diversion of water authorized under a permit issued by the Commissioner pursuant to section 22a-403 of the General Statutes for removal of a dam, dike, or similar structure or for the lowering of the spillway elevation of a dam, dike, or similar structure, provided that the exemption set forth in this paragraph shall not apply when the diversion involves a dam owned or operated by a water company as defined by section 25-32a of the General Statutes.

(15) Diversion of water incidental to the hydraulic dredging of sediments from lakes, ponds or impoundments, and diversion of water incidental to dredging of lakes, ponds or impoundments approved by the Commissioner pursuant to sections 22a-339a through 22a-339e, inclusive, of the General Statutes, provided:

(A) any permit or approval required by section 22a-430 of the General Statutes is obtained; and

(B) no less than seven days before such diversion commences, written notice thereof is given to any water company, as defined by section 25-32a of the General Statutes, which may be affected thereby.

(16) Diversion of water caused by drawing down the surface elevation of an impoundment and subsequent refilling for the purpose of aquatic weed control,

water quality control, or inspection or maintenance of a dam, gate house, discharge structure, reservoir, shoreline or dock, provided:

(A) the surface elevation of the impoundment is lowered only to the elevation and for the amount of time necessary for aquatic weed control, water quality control, or inspection or maintenance of dam, gate house, discharge structure, reservoir, shoreline or dock;

(B) such impoundment was registered or permitted pursuant to sections 22a-365 to 22a-378, inclusive, of the General Statutes; and

(C) no less than seven days before such diversion commences, written notice thereof is given to the Commissioner and to any water company, as defined by section 25-32a of the General Statutes, which may be affected thereby.

(17) Diversion of water in connection with State or Federal flood control projects which are designed and constructed under the supervision of the Department of Environmental Protection or, in the case of a Federal project, sponsored or initiated by the Department of Environmental Protection in accordance with section 25-68c (2) of the General Statutes, provided:

(A) any permit required by sections 22a-39, 22a-342, or 22a-403 of the General Statutes is obtained or, in the case of a Federal project, certification pursuant to Section 401 of the Federal Clean Water Act is obtained; and

(B) this exemption shall not apply in any case of a multipurpose flood management facility where the secondary use is hydropower, public water supply, a storage reservoir, or any other consumptive use of water which is not otherwise exempted by section 22a-377 of the General Statutes or this section.

(18) Collection and drainage or storm water from pavement, building roofs and other impervious areas, provided:

(A) such activity is authorized by the Commissioner pursuant to section 22a-430 of the General Statutes; and

(B) no watercourse is dammed, diked, or channelized as a result of such diversion.

(19) Diversion of surface waters and storm drainage by the Connecticut Department of Transportation incidental to highway construction authorized by the Commissioner pursuant to sections 22a-32, 22a-39, 22a-342, 22a-361, 22a-403 or 25-68b to 25-68h, inclusive, of the General Statutes.

(b) No activity, including construction of structures and facilities, shall be exempted under subsection (a) of this section:

(1) unless best management practices are employed to minimize erosion and sedimentation, to provide for necessary downstream flow in surface waters affected by the diversion, and to avoid adverse impacts to adjacent wells and to fish and wildlife, including to their spawning and nesting seasons; or

(2) if such activity, structure, or facility may alter the habitat of any rare, endangered or threatened species listed or identified by any federal or state governmental agency.

(Effective March 21, 1990)

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Water Diversion

Sec. 22a-377 (c)-1. Regulated activities and registered diversions under the Connecticut water diversion policy act

(a) Any diversion as defined in section 22a-367 (2) of the General Statutes, including construction of structures and facilities, is subject to the provisions of this section and section 22a-377 (c)-2 of the Regulations of Connecticut State Agencies and sections 22a-365 through 22a-378, inclusive, of the General Statutes unless registered pursuant to section 22a-368 of the General Statutes or exempted by section 22a-377 of the General Statutes or section 22a-377 (b)-1 of the Regulations of Connecticut State Agencies. Such diversions include but are not limited to:

(1) withdrawal of groundwater from one or more wells joined in one system whose combined maximum withdrawal exceeds fifty thousand (50,000) gallons of water during any twenty-four hour period, and withdrawal of surface waters in excess of fifty thousand (50,000) gallons during any twenty-four hour period;

(2) collection and discharge of runoff, including storm water drainage or skimming flood flows, from a watershed area of 100 acres or greater;

(3) relocation, retention, detention, bypass, channelization, piping, culverting, ditching, or damming of waters where the drainage area tributary to such waters is 100 acres or greater; and

(4) transfer of water from one distribution system to another where the combined maximum withdrawal from any source supplying the system or interconnected systems exceeds fifty thousand (50,000) gallons during any twenty-four hour period.

(b) Any person or municipality which has received a permit to divert water may maintain such diversion only in accordance with the terms of the permit.

(c) (1) Any person or municipality which registered a diversion pursuant to section 22a-368 of the General Statutes may maintain such diversion only in accordance with the information provided in the registration form filed with the Commissioner. Any person or municipality which registered a diversion pursuant to section 22a-368 of the General Statutes may not cause or allow any modification of such diversion, including but not limited to an increase in withdrawal capacity, without having first obtained a permit under sections 22a-365 to 22a-378, inclusive, of the General Statutes and 22a-377(c)-2 of the Regulations of Connecticut State Agencies, unless such modification is exempt under section 22a-377 of the General Statutes or section 22a-377 (b)-1 of the Regulations of Connecticut State Agencies.

(2) (A) Whenever the Commissioner has a reasonable basis to believe, as a result of information received from the registrant or otherwise, that any person or municipality which registered a diversion pursuant to section 22a-368 of the General Statutes provided in the registration form filed with the Commissioner any information which was incorrect, imprecise or incomplete, or which otherwise did not properly indicate the extent of the diversion to which the registrant was rightfully entitled under such section, the Commissioner may issue to such registrant a notice of inquiry describing wherein the registrant's responses were inaccurate or deficient and establishing a time within which the registrant may file an amendment to the registration curing such inaccuracies or deficiencies. A notice of inquiry shall be served by certified mail, return receipt requested.

(B) The Commissioner may not issue a notice of inquiry later than five years after the effective date of this section.

(C) If a registrant does not file a timely amendment to the registration curing the inaccuracies or deficiencies described in the notice or does not file an answer

disputing the notice by the date the amendment was to have been filed, such registrant may not maintain the subject diversion except as authorized by permit. An answer to a notice of inquiry shall be filed in writing with the Commissioner and shall state with particularity the grounds for disputing the notice.

(D) Upon the filing of an answer disputing a notice of inquiry the Commissioner shall schedule a hearing and, unless the dispute is resolved by the agreement of all parties, shall hold a hearing in accordance with the provisions of chapter 54 of the General Statutes and section 22a-3a-1 of the Regulations of Connecticut State Agencies. The registrant shall have the burden of persuasion with respect to any facts upon which he relies in support of his answer to the notice of inquiry.

(E) In making a final decision the Commissioner shall consider all relevant factors, including, as applicable, the registrant's water use, withdrawal history, system location and characteristics, and installed capacity. Unless otherwise provided by law, any person or municipality which filed an answer to a notice of inquiry shall maintain the subject diversion only in accordance with the terms of the final decision, whether issued by stipulation or after hearing.

(3) If a registrant to whom a notice of inquiry is issued pursuant to subdivision (2) of this subsection files with the Commissioner a timely amendment to his registration, which amendment purports to cure the asserted inaccuracies or deficiencies but in fact does not cure such inaccuracies or deficiencies, the Commissioner shall schedule and hold a hearing in accordance with the provisions of subdivision (2) of this subsection.

(4) (A) Any person or municipality which registered a diversion pursuant to section 22a-368 of the General Statutes may file with the Commissioner in writing a petition to correct any information such person or municipality provided in the registration form filed with the Commissioner. A petition to correct shall state with particularity the grounds therefor.

(B) The Commissioner may deny a petition to correct without holding a hearing. If the Commissioner denies a petition to correct without a hearing, the person or municipality petitioning for the correction may file a request for a hearing in accordance with the provisions of chapter 54 of the General Statutes and section 22a-3a-1 of the Regulations of Connecticut State Agencies. If the Commissioner tentatively determines that a petition to correct should be granted and any person or municipality has demonstrated in a properly filed petition for intervention that he or it is entitled to intervene with respect to such petition to correct, the Commissioner shall schedule and hold a hearing in accordance with the provisions of subdivision (2) of this subsection.

(Effective March 21, 1990)

Sec. 22a-377 (c)-2. Permits under the Connecticut water diversion policy act

(a) (1) An application for a permit to divert water shall be made on a form available from the Commissioner and shall provide the information described in section 22a-369 (1) to 22a-369 (10), inclusive, of the general statutes. If the proposed diversion involves a withdrawal of ground water and can reasonably be expected to change the boundaries of an area of contribution or recharge areas of a well field as delineated on a Level A Map approved under section 22a-354d of the general statutes, the applicant shall submit a revised Level A Map prepared in accordance with section 22a-354b-1 of the Regulations of Connecticut State Agencies.

(2) For purposes of section 22a-369 (7) of the general statutes, the effect of the proposed diversion shall be evaluated using stream flows, where applicable, with

the following recurrence intervals: (A) for low flows: seven-day ten-year, seven-day two-year, thirty-day two-year, and annual average flows; (B) for high flows: peak flows corresponding to the probable maximum flood, half probable maximum flood, and 500-year, 100-year, 50-year, 10-year, and 2-year flood events and average annual flows; and (C) a critical dry period with a 1 in 100 year chance of occurrence. For purposes of this subsection and section 22a-369 of the general statutes, ''drought'' and ''critical dry period'' shall include low flows or water shortages whether resulting from meteorological conditions or human use.

(3) If at any time during review of an application the Commissioner, pursuant to section 22a-371 (a) of the general statutes, requests additional information from the applicant, the applicant shall provide such information within four months of the request. Unless the information is provided within such time the Commissioner shall return the application to the applicant in accordance with section 22a-371 (b) of the general statutes.

(b) Long-range water conservation plans submitted under section 22a-369 (9) of the General Statutes shall contain the information described in such section and shall:

(1) fully describe the policies and goals of the applicant's long-range water conservation efforts, the actions taken or to be taken in furtherance of such policies and goals, an implementation schedule for such actions, and a detailed program for measuring, in terms of quantities of water saved or to be saved, the effectiveness of the applicant's water conservation efforts;

(2) determine, pursuant to section 22a-369 (9) (A) of the General Statutes, the volume of lost or unaccounted for water, based on the average of available data from the five years immediately preceding submission of the application or, if such data are unavailable, on the most current of existing data; and

(3) fully describe the applicant's leak detection and repair program and, in the case of an application to divert water for public water supply, any leak detection services offered to consumers.

(c) (1) If the Commissioner, in consultation with the Department of Health Services and Department of Public Utility Control, determines that a permit applicant's plan under section 22a-369 (9) of the General Statutes to correct sources of lost or unaccounted for water is inadequate considering all relevant factors, including the nature of the applicant's water supply and distribution system, the Commissioner shall request, pursuant to section 22a-371 of the General Statutes, that the applicant provide a plan to reduce lost or unaccounted for water to an acceptable level. Such plan shall include, in addition to any other information requested, a schedule to implement remedial actions and a detailed program for measuring the effectiveness of such actions.

(2) If after the Commissioner notifies the applicant pursuant to subsection (c) of section 22a-371 of the General Statutes that the application is complete and it appears that the applicant's plan under section 22a-369 (9) of the General Statutes to correct sources of lost or unaccounted for water is inadequate, the Commissioner may condition any permit granted to require that the applicant provide a plan, as described in subdivision (1) of this subsection, to reduce lost or unaccounted for water to an acceptable level, to implement such plan in accordance with an approved schedule, and to monitor the effectiveness of such plan as implemented. Nothing in this subdivision shall preclude the Commissioner from denying a permit application.

(d) Environmental impact reports submitted under section 22a-369 (10) of the General Statutes shall contain the information described in such section. The terms ''donor basin'' as used in such section and ''drainage basin'' as used in this

subsection shall include that area which will or is reasonably likely to be affected by the proposed diversion. An environmental impact report shall not be deemed to satisfy section 22a-369 (10) of the General Statutes unless it:

(1) identifies existing water uses, existing and potential (for at least 25 years) conflicts in water use, and existing and projected (for at least 25 years) water supply needs and demands in the affected drainage basin(s);

(2) evaluates the social and economic effects of the proposed diversion on the affected drainage basin(s), including the capacity of remaining water resources to support existing and projected growth and development for at least 25 years;

(3) evaluates the potential effects in the affected drainage basin(s) for at least 25 years of the proposed diversion on water supply needs and demands, wastewater treatment, waste assimilation, power generation, flood management, navigation, water quality, recreation, wetland habitat, agriculture, fish and wildlife, and maintenance of adequate flows for the foregoing needs and resources;

(4) evaluates alternatives to the proposed diversion, including water conservation measures, and the financial costs and environmental impacts of each such alternative;

(5) identifies any water resource conflicts that will or are reasonably likely to result from the proposed diversion for at least 25 years, and evaluates means for resolving such conflicts and the financial costs and environmental impacts of each such means; and

(6) evaluates the effects of the proposed diversion together with the effects of the other diversions which the applicant reasonably expects to commence or maintain in the future.

(e) The Commissioner may condition a permit to require the construction of low flow and higher flow channels if appropriate for protecting aquatic resources.

(f) In making a decision on a permit application, the Commissioner shall consider the factors described in this section, and in subsections (b) and (c) of section 22a-373 of the General Statutes. Furthermore, no permit shall be issued unless the applicant demonstrates that:

(1) the proposed diversion is consistent with the standards, criteria, policies, and water quality classifications for ground and surface water adopted and amended under section 22a-426 of the General Statutes;

(2) the proposed diversion is consistent with the policies and requirements of chapter 440 of the General Statutes and regulations thereunder;

(3) the proposed diversion is designed and will be carried out so as to minimize and, if possible, eliminate flooding and flood hazards, and to be consistent with the policies and requirements of chapter 476a of the General Statutes and regulations thereunder;

(4) if it is within or may significantly affect the coastal area as defined by subsection (a) of section 22a-94 of the General Statutes, the proposed diversion is consistent with the goals and policies of chapter 444 of the General Statutes; and

(5) the proposed diversion is consistent with the relevant policies of the State Plan of Conservation and Development adopted under sections 16a-24 to 16a-32, inclusive, of the General Statutes (copies of such Plan are available at the Connecticut Office of Policy and Management).

(g) If the applicant for a permit will not be the user of all or a portion of the waters proposed to be diverted, the applicant and users shall jointly make application for the permit. For purposes of this subsection, a consumer, as that term is defined by section 25-32a of the General Statutes, shall not be deemed a user.

(h) (1) The Commissioner shall establish the duration of each diversion permit in light of all relevant factors, including but not limited to:

(A) the extent to which the waters affected by such permit have already been allocated;

(B) the uses to which such previously-allocated waters are put, including non-consumptive uses;

(C) the need for water system rehabilitation or for an effective water conservation program; and

(D) the factors set out in this section and sections 22a-369 and 22a-373 of the General Statutes.

In no event shall a permit authorize any diversion for a period greater than twenty-five years. Nothing in this subsection shall preclude the Commissioner from instituting proceedings to suspend, modify, or revoke any permit.

(2) An application for renewal or modification of a diversion permit shall be made and disposed of in accordance with the provisions of this section.

(i) Diversion permits shall contain the following standard conditions in addition to any other conditions which the Commissioner deems appropriate for accomplishing the purposes of sections 22a-365 to 22a-378, inclusive, of the General Statutes and this section:

(1) The permittee shall notify the Commissioner in writing two weeks prior to: (A) commencing construction or modification of structures or facilities authorized herein; and (B) initiating the diversion authorized herein.

(2) The permittee may not make any alterations, except de minimis alterations, to any structure, facility, or activity authorized by this permit unless the permittee applies for and receives a modification of this permit in accordance with the provisions of section 22a-377 (c)-2 of the Regulations of Connecticut State Agencies. Except as authorized by subdivision (5) of section 22a-377 (b)-1 (a) of the Regulations of Connecticut State Agencies, the permittee may not make any de minimis alterations to any structure, facility, or activity authorized by this permit without written permission from the Commissioner. A de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

(3) All structures, facilities, or activities constructed, maintained, or conducted pursuant hereto shall be consistent with the terms and conditions of this permit, and any structure, facility or activity not specifically authorized by this permit, or exempted pursuant to section 22a-377 of the General Statutes or section 22a-377 (b)-1 of the Regulations of Connecticut State Agencies, shall constitute a violation hereof which may result in modification, revocation or suspension of this permit or in the institution of other legal proceedings to enforce its terms and conditions.

(4) Unless the permittee maintains in optimal condition any structures or facilities authorized by this permit, the permittee shall remove such structures and facilities and restore the affected waters to their condition prior to construction of such structures or facilities.

(5) In issuing this permit, the Commissioner has relied on information provided by the permittee. If such information was false, incomplete, or misleading, this permit may be modified, suspended or revoked and the permittee may be subject to any other remedies or penalties provided by law.

(6) If construction of any structures or facilities authorized herein is not completed within three years of issuance of this permit or within such other time as may be provided by this permit, or if any activity authorized herein is not commenced

within three years of issuance of this permit or within such other time as may be provided by this permit, this permit shall expire three years after issuance or at the end of such other time.

(7) This permit is subject to and does not derogate any rights or powers of the State of Connecticut, conveys no property rights or exclusive privileges, and is subject to all public and private rights and to all applicable federal, state, and local law. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this State. The issuance of this permit shall not create any presumption that this permit should be renewed.

(8) In constructing or maintaining any structure or facility or conducting any activity authorized herein, or in removing any such structure or facility under paragraph 4 hereof, the permittee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. The permittee shall immediately inform the Commissioner of any adverse impact or hazard to the environment which occurs or is likely to occur as the direct or indirect result of the construction, maintenance, or conduct of structures, facilities, or activities authorized herein.

(9) This permit is not transferable without the prior written consent of the Commissioner.

(10) This permit shall expire on (date).

(Effective June 21, 1991)

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Dams and Similar Structures

Sec. 22a-409-1. Registration of dams and similar structures

(a) **Definitions.**

As used in Sections 22a-409-1 and 22a-409-2:

(1) ''Abutment'' means natural ground that borders on either end of the dam structure.

(2) ''Acre-foot'' means a unit of volume equal to 43,560 cubic feet or 325,853 gallons (one foot depth over one acre).

(3) ''Average daily traffic'' (ADT) means a measure of the number of vehicles using a specific road in an average twenty-four hour period.

(4) ''Appurtenance'' means any structure or mechanism other than the dam itself which is associated with its operation.

(5) ''Breach'' means an alteration of a dam either deliberately or accidentally in such a way as to release its impounded waters.

(6) ''Commissioner'' means the commissioner of environmental protection.

(7) ''Dam'' means any barrier of any kind whatsoever which is capable of impounding or controlling the flow of water, including but not limited to storm water retention or detention dams, flood control structures, dikes and incompletely breached dams.

(8) ''Dam Height'' means the vertical distance from the crest of a dam or similar structure to the downstream toe of such dam or similar structure.

(9) ''Embankment'' means the fill material, usually earth or rock, placed with sloping sides providing a barrier which impounds water.

(10) ''Flood'' means a general and temporary condition of partial or complete inundation of normally dry land areas.

(11) ''Hazard Potential'' means probable damage that would occur if the structure failed, in terms of loss of human life and economic loss or environmental damage.

(12) ''Owner'' means any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency, or political or administrative subdivision of the state, or any other legal entity of any kind holding legal title to the dam.

(13) ''Structure'' means the dam, its appurtenances, abutments and foundation.

(14) ''Toe'' means the base portion of the impounding structure which intersects with natural ground at the upstream and downstream sides.

(b) The owner of any dam or similar structure shall register on or before July 1, 1984, with the commissioner on a form prescribed by him, the location and dimensions of such dam or structure. In addition the registration shall include:

(1) the name, address and telephone number of the dam owner and operator;

(2) the name of the dam and impoundment;

(3) the present condition of the dam;

(4) whether the low-level outlet is operable;

(5) a map showing the location of the dam;

(6) a description of the materials used in constructing the dam;

(7) the dimensions of the impoundment;

(8) the dimensions of the spillway;

(9) a general description of the level of development in the floodplain below the dam;

(10) a statement of the use(s) of the impounded water;

(11) whether the dam is registered under the Connecticut Water Diversion Policy Act;

(12) a check or money order payable to the DEP, Water Resources Unit for the amount of the registration fee required by Section 22a-409 (b) of the General Statutes, as amended; and

(13) other information which the commissioner deems necessary.

(c) The owner shall report any change in the following information provided in the registration to the commissioner within ten (10) days of such change:

(1) The name, address and telephone number of the dam owner or operator;

(2) The name of the dam or its impoundment;

(3) The present condition of the dam; or

(4) The condition of the low level outlet.

(d) A registration form shall not be deemed received by the commissioner until all information specifically required by statute or regulation is submitted with the appropriate fee. Upon review of a complete registration, the commissioner shall issue a certificate of registration to the owner of the dam.

(e) (1) The commissioner shall waive the registration fee for any dam which is owned by the State of Connecticut or the federal government.

(2) Wherever a single impoundment is formed by two or more dams, there shall be a single registration fee based on the highest dam forming the impoundment.

(f) Failure to register by July 1, 1984 shall subject the owner of the dam to the forfeiture and injunction provisions of Section 22a-407 of the General Statutes, as amended.

(g) Any violation of these regulations shall subject the owner of the dam to the injunction provisions of Section 22a-6 (3) of the General Statutes, as amended.

(Effective June 23, 1986)

Sec. 22a-409-2. Dam safety inspection regulations

(a) **Jurisdiction.** All dams which must be registered pursuant to Section 22a-409 of the General Statutes shall be under the jurisdiction of the Commissioner. Dams of the State, or any political subdivision thereof, and all dams within the State except those of the United States or its instrumentalities are included within the jurisdiction conferred by this section.

(b) **Periodic Inspections.** The following dams shall be regularly inspected by the Department of Environmental Protection at a frequency as described in Section 22a-409-2 (e) (2) of these regulations:

(1) Dams which pose a significant (B) or high (C) hazard to life or property as defined in Section 22a-409-2 (d);

(2) Dams which are:

(A) greater than twenty-five (25) feet in height with an impoundment capacity greater than fifteen (15) acre-feet; or

(B) greater than six (6) feet in height but less than or equal to twenty-five (25) in height with an impoundment capacity greater than fifty (50) acre-feet; or

(3) All other dams with an impoundment capacity of three (3) acre-feet or more.

(c) **Periodic Inspection Procedures.**

(1) Each periodic inspection shall consist of, but not be limited to, the following:

(A) Visual inspection of the dam, its appurtenances, abutments, downstream toe and all other areas which could affect the safety of the dam. In addition, inspection and operation of mechanical systems, and inspection of the abutments downstream, the components of the dam which are under water during normal operation, or the

interior of outlet conduits shall be made by the owner, if required by the Commissioner to more completely assess the condition of the dam;

(B) Review and analysis of available data on the design, construction, operation, maintenance and performance of the structure;

(C) Observation of the nature and extent of downstream development which would be subject to inundation in the event of a dam breach for purposes of assessing the potential hazard which the dam poses;

(D) Evaluation of the general condition of the structure, including when possible, assessment of its hydrologic and its hydraulic capabilities and structural stability.

(E) Evaluation of the operation, maintenance and inspection procedures employed by the owner.

(F) Evaluation of any other conditions which constitute or could constitute a hazard to the integrity of the structure.

(2) The inspection shall be performed by qualified personnel of the D.E.P. Dam Safety Program with technical training in the inspection of dams and under the supervision of a civil engineer.

(3) A standard dam inspection checklist based upon accepted standards of visual dam inspection and inspection guidelines which direct the proper use of the checklist shall be prepared by the Commissioner and will be utilized by the inspection team. The Commissioner will issue a written report based on the findings of the periodic inspection which shall include, but not be limited to, the following:

(A) An assessment of the condition of the structure based on the visual observations, available data on the design, construction, operation, maintenance and performance of the structure, the hydrologic and hydraulic capacities and the structural stability of the dam;

(B) Recommendations for any emergency measures or actions, if required to assure the immediate safety of the structure;

(C) Recommendations for remedial measures and actions related to design, construction, operation, maintenance and inspection of the structure, if required;

(D) Recommendations for additional detailed studies, investigations and analyses, if required; and

(E) Recommendations for time periods appropriate for implementing any necessary emergency, remedial measures and actions and any necessary additional investigations and analyses, as required by subparagraph (B), (C) and (D) of this subdivision; and

(F) Recommendations for routine maintenance and inspection by the owner, if required.

(4) The Commissioner shall furnish a copy of the written report to the owner.

(A) The owner shall within thirty (30) days of receipt of the written report, inform the Commissioner in writing of his or her schedule of implementation of any required recommendations.

(B) A copy of the report will be kept on file with the records of the Commissioner pertaining to dam safety.

(d) **Classification of Dams.**

(1) The Commissioner shall assign each dam to one of five classes according to its hazard potential. Such classification shall be determined by the Commissioner during the initial inspection.

(A) A Class AA dam is a negligible hazard potential dam which, if it were to fail, would result in any of the following:

(i) no measurable damage to roadways;

(ii) no measurable damage to land and structures;

(iii) negligible economic loss.

(B) A Class A dam is a low hazard potential dam which, if it were to fail, would result in any of the following:

(i) damage to agricultural land;

(ii) damage to unimproved roadways (less than 100 ADT);

(iii) minimal economic loss.

(C) A Class BB dam is a moderate hazard potential dam which, if it were to fail, would result in any of the following:

(i) damage to normally unoccupied storage structures;

(ii) damage to low volume roadways (less than 500 ADT);

(iii) moderate economic loss.

(D) A Class B dam is a significant hazard potential dam which, if it were to fail, would result in any of the following:

(i) possible loss of life;

(ii) minor damage to habitable structures, residences, hospitals, convalescent homes, schools, etc;

(iii) damage to or interruption of the use or service of utilities;

(iv) damage to primary roadways (less than 1500 ADT) and railroads;

(v) significant economic loss.

(E) A Class C dam is a high hazard potential dam which, if it were to fail, would result in any of the following:

(i) probable loss of life;

(ii) major damage to habitable structures, residences, hospitals, convalescent homes, schools, etc.;

(iii) damage to main highways (greater than 1500 ADT);

(iv) great economic loss.

(2) The classification of a Class A, BB, B and C dam shall be reviewed during each subsequent periodic inspection.

(3) All dams will be subject to reclassification at any time the Commissioner determines that the hazard potential has changed.

(4) Potential future development of the area downstream from the dam that would be affected by its failure shall be considered in determining the classification.

(5) Where a dam is so located that its failure would likely cause a downstream dam to fail, the hazard classification of this dam shall be at least as great as that of the downstream dam.

(6) Potential damage to habitable structures will be considered minor when habitable structures are not within the direct path of the probable flood wave produced upon failure of a dam and where such structures will experience:

(A) No more than 1.5 feet of rise of flood water above the lowest ground elevation adjacent to the outside foundation walls; or

(B) No more than 1.5 feet rise of flood water above the lowest habitable floor elevation of the structure;

the lower of the two elevations governing.

(7) The extent of potential damage resulting from a dam breach may, notwithstanding the above, justify designating damage as either major or minor. Such a designation may be made after a detailed analysis has established the relative impact of the probable dam breach and has considered the following factors:

(A) The conditions prior to and after a dam breach;

(B) The extent to which access has been affected, both before and after a dam breach;

(C) The extent of damage.

(e) **Inspection Schedule.**

(1) The Commissioner or his representative may enter upon private property at any time to investigate or inspect any dam.

(2) The Commissioner shall periodically inspect all dams in accordance with the following schedule. These time periods are the maximum time between inspections, more frequent inspections may be performed at the discretion of the Commissioner.

Hazard Class	*Inspection Frequency*
Class A (low)	10 years
Class BB (moderate)	7 years
Class B (significant)	5 years
Class C (high)	2 years

(3) Inspections scheduled according to the time period set forth above, may be modified, at the discretion of the Commissioner, in special cases where it is desirable to observe a dam under particular conditions (i.e. wet season, dry season, foliage. . .).

(4) The Commissioner may require scheduled inspections on a more frequent basis if particular conditions exist which require more frequent monitoring.

(5) The Commissioner may require Class B and C dams to be inspected after the occurrence of a major flood event. The date of these post-flood inspections will be the starting date from which the date of the next regularly scheduled periodic inspection will be computed.

(6) The Commissioner shall exempt from periodic inspections, any dam which, after an initial inspection, impounds less than three (3) acre-feet of water or any Class AA dam, unless the Commissioner determines that such dam poses a unique hazard.

(f) **Inspection by the Owner.**

(1) A dam owner may elect to employ the services of a professional engineer registered in the State of Connecticut, experienced in the design, construction and inspection of dams to inspect the owner's dam according to the following inspection schedule:

Hazard Class	*Inspection Schedule*
Class A (low)	10 years
Class BB (moderate)	7 years
Class B (significant)	5 years
Class C (high)	2 years

(2) The owner shall furnish a copy of each completed inspection report in a format determined by the Commissioner within thirty (30) days of the date of the inspection to the DEP Dam Safety Program.

(3) The inspection report shall be sealed by a professional engineer registered in the State of Connecticut and shall include:

(A) Those items listed in Section 22a-409-2 (c), and

(B) Correspondence from the owner stating his or her intent to implement such recommendations, if required.

(4) If the dam owner elects to comply with subdivisions (1) through (3), inclusive, the Commissioner shall periodically inspect the dam according to the following schedule:

Hazard Class	*Inspection Frequency*
Class A (low)	20 years
Class BB (moderate)	14 years
Class B (significant)	10 years
Class C (high)	6 years

The year the Commissioner inspects the dam, the owner shall be exempt from conducting his or her own inspection.

(g) **New Dam Construction.**

(1) All new dams, and dams which have a high or significant hazard classification undergoing substantial repairs according to the permit authorization of the Commissioner, must be inspected by the professional engineer employed by the dam owner for construction services according to the following schedule:

(A) Upon first filling of the impoundment, after completion of new construction or substantial repairs, inspection should be performed to assure proper functioning of dam components.

(B) Upon attainment of full impoundment, inspections of the dam should be performed frequently for the first two (2) months.

(C) These dams shall be inspected at least annually for the first three (3) years of operation.

(D) After the third year of operation, these dams will be inspected according to the inspection schedule set forth in Section 22a-409-2 (e).

(E) The Commissioner may exempt from the requirements of this subsection repairs to high or significant hazard dams which he determines do not affect the immediate safety of the dam.

(2) An inspection report must be submitted by the owner's engineer to the Commissioner on a form prescribed by him, within thirty (30) days after:

(A) The last inspection performed during the first two (2) months after full impoundment was attained; and

(B) Each annual inspection as set forth in Section 22a-409-2 (g) (1) (C).

(h) **Fees for Inspection by the State.**

(1) Each owner shall pay an inspection fee to cover the cost to the State of making both scheduled inspections and post-flood inspections. Such fee bill shall accompany the written report and shall be paid within thirty (30) days after receipt by the owner.

(2) The owner shall submit the inspection fee by check or money order payable to DEP Dam Safety Program

(3) The fee for each inspection made by the State shall be according to the following:

Hazard Class	*Fee*
Class A (low)	$150.00
Class BB (moderate)	$150.00
Class B (significant)	$250.00
Class C (high)	$350.00

(4) The Commissioner shall waive the inspection fee for any dam which is owned by the State of Connecticut.

(i) **Notification.**

(1) The Commissioner shall notify a dam owner of the upcoming date for a regularly scheduled inspection at least ninety (90) days before the inspection.

(2) If, the Commissioner does not receive notification of the owner's intent to perform the inspection with his or her own engineer thirty (30) days prior to the date of the scheduled inspection, the Commissioner shall inspect the dam and charge the owner the appropriate fee.

(3) If after notification by the owner of his or her intent to perform the inspection, the Commissioner does not receive a copy of the inspection report within thirty (30) days of the scheduled inspection date, the Commissioner shall inspect the dam and charge the owner the appropriate fee.

(j) **Responsibility of the Owner.**

(1) Inspections by the State do not relieve an owner of the dam of the legal duties, obligations or liabilities incidental to the ownership or operation of the dam.

(2) The owner or his or her representative shall inspect the dam on a frequent basis to assure that no unsafe conditions are developing including but not limited to, weather related damage, animal activity or vandalism. Class B and Class C dams shall be inspected by the owner or his or her representative at least quarterly and a written record shall be maintained and be made available to the Commissioner upon request.

(3) The owner or his or her representative shall inspect the dam during and after the occurrence of major flood events to assure that the structure is withstanding the flood waters safely.

(4) The owner shall fully and promptly advise the Commissioner of any sudden or unpredicted floods, unusual circumstances or major changes in the condition of the dam.

(5) The owner shall report to the Commissioner any major damage which the dam has suffered, such as, overtopping by flood waters, erosion of the spillway discharge channel and any major problems which are observed to have developed such as, new seepage or a significant increase in seepage quantities, settling, cracking or movement of the embankment or any component of the dam.

(6) To facilitate visual inspection during the intervals between regularly scheduled inspections, the dam owner shall be required to maintain the structure and adjacent area free of brush and tree growth.

(A) Brush and tree growth shall be cleared from embankments and within twenty-five (25) feet of the downstream toe and the abutment embankment contact;

(B) Grass or other suitable vegetative cover must be established and maintained on abutments and embankments.

(7) The owner shall maintain a written record of all inspections and maintenance work performed. This record shall include observations made regarding areas of concern on the structure and descriptions of the major and minor repairs performed and materials utilized.

(Effective April 30, 1987)

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Wastewater Treatment Facility Operator Certification

Sec. 22a-416-1. General

(a) Sections 22a-416-1 to 22a-416-10, inclusive, of the Regulations of Connecticut State Agencies shall be known as the Wastewater Treatment Operator Regulations.

(b) **Definitions**

For purposes of Sections 22a-416-1 to 22a-416-10, inclusive of the Regulations of Connecticut State Agencies:

(1) ''Advisory committee'' means the advisory committee appointed under section 22a-416-10 of the Regulations of Connecticut State Agencies;

(2) ''Applicant'' means an individual who files an application;

(3) ''Application'' means an application for operator certification under the Wastewater Treatment Operator Regulations;

(4) ''Biological wastewater treatment process'' means the process by which metabolic activities of bacteria and other microorganisms break down complex organic materials into simple, more stable substances;

(5) ''BOD_5'' means the amount of oxygen utilized by bacteria in the biochemical oxidation of organic matter over five days;

(6) ''Certificate'' means a certificate issued by the commissioner stating that the operator named therein has met the minimum requirements for the operator classification specified in such certificate;

(7) ''Certification'' means the issuance of a certificate;

(8) ''Class'' and ''Classification'' are interchangeable;

(9) ''Commissioner'' means the Commissioner of Environmental Protection as defined in subsection (b) of section 22a-2 of the general statutes;

(10) ''Chief Operator'' means the operator who has ultimate supervisory responsibility for the operation and maintenance of a wastewater treatment facility, is responsible for signing the discharge monitoring reports and is responsible for the daily on-site supervision, process control direction and overall performance of such facility;

(11) ''Contact hour'' means one hour of instruction on a topic determined by the commissioner to be related to wastewater treatment facility operation;

(12) ''Continuing education unit'' (CEU) means ten contact hours of participation in an organized higher education program approved by the commissioner for wastewater treatment operators;

(13) ''Day'' means calendar day;

(14) ''Department'' means the Connecticut Department of Environmental Protection;

(15) ''Direct responsible charge experience'' for a chief operator or shift operator means experience as an on-site daily supervisor of the operation of a wastewater treatment facility with responsibility for, without limitation, process control direction. Operation of individual process units alone does not constitute direct responsible charge experience. ''Direct responsible charge experience'' for a process control operator means experience as on-site daily responsibility for process control direction of a wastewater treatment facility;

(16) ''Discharge monitoring report'' means the monthly report required by subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies;

(17) ''Domestic wastewater'' means wastewater discharged from residences or from employee or public washrooms in institutions, businesses, or industrial establishments;

(18) ''Domestic wastewater process'' means any process of treating any volume of wastewater consisting wholly or partially of domestic wastewater;

(19) ''Examination'' means an examination for operator certification under subsection (b) of section 22a-416-5 of the Regulations of Connecticut State Agencies;

(20) ''Foreign certificate'' means a certificate issued by a state, territory or possession of the United States other than Connecticut, stating that the holder thereof has met the minimum qualifications for a wastewater treatment facility operator required by such state, territory, or possession;

(21) ''G.E.D.'' means a general equivalency diploma obtained by passing a general educational development test or its equivalent as recognized by the issuing state board of education;

(22) ''Higher education'' means post-high school education or training, including but not limited to training courses, seminars, workshops, conferences, and college level courses, related, in the commissioner's sole judgement, to wastewater treatment facility operation;

(23) ''Industrial wastewater'' means wastewater other than domestic wastewater, discharged from institutions, businesses, or industrial establishments that is amenable to treatment by means of biological wastewater treatment;

(24) ''In the field'' refers to employment at a wastewater treatment facility or employment which, in the commissioner's sole judgement, is related to the operation of a wastewater treatment facility; examples of such employment include start-up services, technical assistance, operator training or the administration of a wastewater treatment facility;

(25) ''MGD'' means million gallons per day;

(26) ''Misconduct'' means behavior by an applicant in the course of an operator certification examination which conduct interferes with administration of such examination including but not limited to, talking or otherwise making noise during examination, cheating, and use of unauthorized material;

(27) ''Monthly operating report'' means the monthly report required by subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies;

(28) ''Operator'' means any individual who operates, is contracted to operate, or is employed by an entity or contractor to operate equipment at a wastewater treatment facility so as to affect treatment processes;

(29) ''Operator experience'' means an individual's experience of satisfactorily performing the duties of an operator at a wastewater treatment facility while employed at any such facility;

(30) ''Operator-in-training'' means an applicant who has satisfied all of the requirements for certification under the wastewater treatment operator regulations except for the minimum experience requirements of subdivision (c)(5) of section 22a-416-4 of the Regulations of Connecticut State Agencies;

(31) ''Operating shift'' means a regular period of time at a wastewater treatment facility when operators are present and make process control changes;

(32) ''Owner'' means the owner in fee simple of a wastewater treatment facility, provided that if the owner contracts with another person to operate such facility, the contractor shall be deemed the owner for the purposes of the wastewater treatment operator regulations;

(33) ''Population equivalent'' means the estimated population that contributes or will contribute a given amount of BOD5 or suspended solids to wastewater. For the purpose of determining a population equivalent, estimated population shall be

calculated assuming 0.17 pounds of BOD5 per capita per day or 0.20 pounds of suspended solids per capita per day;

(34) ''Process control direction'' means direction of the operation of the biological wastewater treatment process at a wastewater treatment facility;

(35) ''Process control operator'' means the operator who, subject to the authority of the chief operator, is responsible for process control direction;

(36) ''Reciprocal certificate'' means a certificate issued pursuant to subdivision (c)(5) of section 22a-416-5 of the Regulations of Connecticut State Agencies;

(37) ''Satisfactory evidence'' means certified copies of official transcripts, diplomas, course descriptions, foreign certificates, or other documents acceptable to the commissioner;

(38) ''Shift operator'' means the operator, subject to the authority of the chief operator, who has supervisory responsibility for the operation and maintenance of a wastewater treatment facility during any operating shift;

(39) ''Supervisory responsibility'' means daily routine responsibility for managing personnel and operations at a wastewater treatment facility;

(40) ''Wastewater'' means domestic or industrial wastewater;

(41) ''Wastewater treatment facility'' means an arrangement of structures and equipment, including solids handling equipment, whose purpose is to treat domestic wastewater or industrial wastewater by means of a biological wastewater treatment process. A domestic wastewater disposal system for a category I or II discharge as defined in subparagraphs (b)(2)(A) and (b)(2)(B) of section 22a-430-1 of the Regulations of Connecticut State Agencies is not a wastewater treatment facility; and

(42) ''Watchman shift'' means a regular period of time at a wastewater treatment facility during which one or more operators are present but do not make any independent process control changes or conduct any other independent activities which could affect the quality of air, solids, or liquids discharged from the facility.

(Effective June 25, 1984; amended June 5, 2000)

Sec. 22a-416-2.

Repealed, June 5, 2000.

Sec. 22a-416-3. Classification of wastewater treatment facilities

(a) **Classes of wastewater treatment facilities**

There shall be four classes of wastewater treatment facilities: Class I, Class II, Class III, and Class IV.

(b) **Determination of class**

The commissioner classifies each wastewater treatment facility in Connecticut by calculating points therefore in accordance with appendix A and applying the following chart:

Facility Class	I	II	III	IV
Points	30 or less	31–55	56–75	76 or more

(c) **List of wastewater treatment facilities by class.**

The commissioner maintains a list of wastewater treatment facilities in Connecticut which identifies the class of each such facility.

(d) **Notification of a change in class**

The commissioner shall notify the owner of a wastewater treatment facility in writing if the commissioner determines under subsection (b) of this section that the class of such facility should be revised as a result of equipment or treatment process

modifications thereat. Within 30 days of receiving such notice, the owner may request in writing a consultation with the commissioner concerning the proposed change of class. Within 45 days of such consultation the commissioner will provide the owner with a written decision as to whether he or she will retain the existing facility class or revise it in accordance with the commissioner's prior notice.

(Effective June 25, 1984; amended June 5, 2000)

Sec. 22a-416-4. Classes and qualifications of wastewater treatment facility operators

(a) **Classification of operators**

There shall be four classes of operator certification: Class I, Class II, Class III, and Class IV.

(b) **Language requirement for certification**

An applicant for operator certification shall be able to speak, read and write the English language to the extent deemed necessary to perform the duties thereof.

(c) **Minimum requirements for operator certification**

(1) Class I Operator

An applicant for Class I Operator certification shall (A) submit satisfactory evidence of (i) at least one year of experience in the operation of a wastewater treatment facility of Class I or higher; (ii) a high school diploma or G.E.D.; and (iii) successful completion of a basic wastewater treatment facility operation course, approved by the commissioner, equaling at least nine CEU's; and (B) pass the Class I examination. No substitutions for the requirements of this subdivision shall be permitted.

(2) Class II Operator

An applicant for Class II operator certification shall (A) submit satisfactory evidence of (i) at least three years of experience in the operation of a wastewater treatment facility of Class I or higher; (ii) a high school diploma or G.E.D.; and (iii) successful completion of higher education equivalent to at least 30 CEUs in a field determined by the commissioner to be related to the operation of a wastewater treatment facility, of which at least 18 CEUs are directly related to the operation of a wastewater treatment facility; and (B) pass the Class II examination.

(3) Class III Operator

An applicant for Class III operator certification shall (A) submit satisfactory evidence of (i) at least four years of experience in the operation of a wastewater treatment facility of Class II or higher; (ii) a high school diploma or G.E.D.; and (iii) successful completion of higher education equivalent to at least 90 CEUs in a field determined by the commissioner to be related to the operation of a wastewater treatment facility; and (B) pass the Class III examination.

(4) Class IV Operator

An applicant for Class IV operator certification shall submit satisfactory evidence of (A) at least four years of experience in the operation of a Class III or IV wastewater treatment facility, of which experience at least two years are direct responsible charge experience as a chief operator at a Class III wastewater treatment facility or shift or process control operator at a Class IV wastewater treatment facility; (i) a high school diploma or G.E.D.; and (ii) successful completion of higher education equivalent to at least 135 CEUs in a field determined by the commissioner to be related to the operation of a wastewater treatment facility; and (B) pass the Class IV examination.

(5) Operator-in-training

(A) An applicant for Class I, II or III operator certification shall be designated by the commissioner, in writing, to become an operator-in-training in Class I, II,

or III, respectively, if such applicant meets all the requirements for such certification except for the minimum operating experience requirement under subdivisions (c)(1), (c)(2), or (c)(3) of this section, respectively. Except as provided in subparagraph (B) of this subdivision, when the owner of the wastewater treatment facility at which an operator-in-training is employed notifies the commissioner in writing that such operator-in-training has satisfied the minimum experience requirements for the certification at issue, the commissioner shall issue said certificate.

(B) An operator-in-training who, within five years after passing the certification examination does not obtain the required minimum experience for the certificate applied for shall not be awarded such certificate unless he or she reapplies therefor, takes the certification exam and passes such examination, and satisfies the minimum experience requirement.

(d) **Substitution of higher education for minimum operating experience requirements**

(1) General

(A) There shall be no substitution for the minimum operating experience requirement for Class I operator certification prescribed in subdivision (c)(1) of this section.

(B) Higher education may be substituted for up to fifty per cent of the minimum operating experience requirement for Classes II, III, and IV operator certification prescribed in subdivisions (c)(2), (c)(3), and (c)(4) of this section.

(C) Higher education shall not be substituted for the required direct responsible charge experience prescribed in subdivision (c)(4) of this section.

(D) Higher education which is substituted for any operating experience requirement prescribed in subsection (c) of this section shall not also be applied to any minimum education requirement prescribed by such subsection.

(2) Higher education equivalents

For the purposes of the Wastewater Treatment Operator Regulations:

(A) Forty-five CEUs are equivalent to one year of higher education. One semester hour is equivalent to 1.6 CEUs.

(B) Forty-five CEUs are equivalent to one year of operating experience.

(3) Operator training courses

Any course, seminar, workshop, conference or college course which the commissioner determines in his sole judgement to be related to wastewater treatment facility operation may be used to meet the higher education requirements of subparagraphs (c)(1)(A), (c)(2)(A), (c)(3)(A), and (c)(4)(A) of this section. The commissioner shall determine in his sole judgement the number of CEUs to which particular hours of higher education are equivalent.

(e) **Substitution of other experience for minimum operating experience requirements**

(1) For up to 50 percent of the minimum operating experience requirement for Class I, II, III, or IV certification the commissioner may, in his discretion, allow an applicant to substitute operating experience from the maintenance operation of a wastewater treatment facility, from operations of a drinking water treatment facility, from the laboratory operation of a drinking water treatment facility, or from a wastewater treatment facility which does not utilize biological treatment processes, provided that the commissioner determines that the proposed substitute experience is sufficiently related to the operation of a wastewater treatment facility.

(2) There shall be no substitution for direct responsible charge experience.

(f) **Substitution of direct responsible charge experience for higher education CEU requirements**

(1) For up to fifteen CEUs of the higher education requirement in subdivision (c)(3) of this section, the commissioner may in his discretion allow an applicant to substitute up to four months of direct responsible charge experience in a Class II wastewater treatment facility as the chief operator or up to four months of direct responsible charge experience in a Class III wastewater treatment facility.

(2) For up to thirty CEUs of the higher education requirement in subdivision (c)(4) of this section, the commissioner may in his discretion allow an applicant to substitute up to eight months of direct responsible charge experience in a Class III wastewater treatment facility as the chief operator or up to eight months of direct responsible charge experience in a Class IV wastewater treatment facility.

(3) Direct responsible charge experience substituted for any education requirement in subsection (c) of this section shall not also be applied to any minimum experience requirement thereunder.

(g) **Direct responsible charge accumulation.** For purposes of subsections (d) and (f) of this section:

(1) Direct responsible charge experience for a chief operator shall accumulate at the rate of 100% of time as a chief operator.

(2) Direct responsible charge experience for a shift operator shall accumulate at the rate of 100% of time as a shift operator.

(3) Direct responsible charge experience for a process control operator shall accumulate at the rate of 50% of time as a process control operator.

(4) Any certified operator acting as chief or shift operator for a minimum period of 2 consecutive working days under subdivisions (b)(8) and (b)(9) of section 22a-416-6 of the Regulations of Connecticut State Agencies during the absence of the permanent chief operator or shift operator may accrue direct responsible charge experience for that time.

(Effective June 25, 1984; amended June 5, 2000)

Sec. 22a-416-5. Application and certification procedures

(a) **Applications**

(1) An application shall be made on a form furnished by the commissioner. Unless a completed application is received by the commissioner no later than 45 days before the date of a scheduled examination, the applicant shall not take that examination.

(2) Unless by no later than 45 days before a scheduled examination the applicant has satisfied either (A) the minimum experience and education requirements for the operator certification sought, or (B) the minimum requirements for operator-in-training status for such classification under subparagraph (c)(5)(A) of section 22a-416-4 of the Regulations of Connecticut State Agencies, he or she shall not take that examination.

(3) Unless on the date he or she submits the application the applicant is actually employed as an operator at a Connecticut wastewater treatment facility or meets the minimum requirements for operator-in-training status under subparagraph (c)(5)(A) of section 22a-416-4 of the Regulations of Connecticut State Agencies, he or she shall not take an examination for any class of certification; provided, if the applicant is not so employed at a Connecticut wastewater treatment facility at such time, the commissioner may allow him or her to take the next scheduled examination for operator certification if the owner of a Connecticut wastewater treatment facility (A) intends to hire such applicant as an operator when he or she succeeds in obtaining such certification, and (B) notifies the commissioner in writing of such intent no later than 45 days before such examination.

(4) Each application shall be accompanied by an application fee of $95. Any application submitted without such fee shall be considered incomplete and shall not be processed until such fee has been paid in full. Such fee shall be paid by certified bank check, money order or personal check made payable to the ''Department of Environmental Protection''. The check or money order shall state on its face ''Wastewater Operator Certification Examination''.

(5) The application fee is non-refundable, provided, if an applicant pays such fee but fails to take the next scheduled examination, the commissioner will apply such fee toward a future application which such applicant may file.

(b) **Examinations**

(1) The commissioner shall, for each class of operator certification, hold at least one examination per year at a place and time prescribed by the commissioner.

(2) At least 90 days before a scheduled examination, the commissioner will provide notice thereof to each wastewater treatment facility in Connecticut.

(3) At least 30 days before a scheduled examination, the commissioner shall notify each applicant whether he or she meets the minimum requirements in section 22a-416-4 of the Regulations of Connecticut State Agencies for the operator certification sought and is therefore eligible to take such examination.

(4) No applicant shall be allowed to take an examination without first showing to the examination proctor a valid photographic identification and the notice of eligibility provided under subsection (3) of this section.

(5) An applicant shall not have any programmable calculator or any written documents or papers during the examination. At the end of the examination, the applicant shall return to the examination proctor all examination documents.

(6) The commissioner shall notify each applicant of his or her results on such examination but shall not return the examination answer sheets or questions to the applicant. At an applicant's request and upon payment of the regrading fee required by the applicable testing service, the commissioner shall submit the applicant's answer sheet to such testing service for regrading. Under no circumstances shall the commissioner allow the applicant to review examination questions before or after the examination.

(7) The examination proctor may immediately expel an applicant from the examination room for misconduct. The results of an examination taken by an applicant expelled for misconduct shall be voided. Expulsion for misconduct shall disqualify the applicant from taking an examination for one year from the date of such expulsion.

(c) **Issuance of Certificates**

(1) Upon fulfillment by an applicant of the requirements of section 22a-416-4 of the Regulations of Connecticut State Agencies and this section, the commissioner shall issue a certificate of the appropriate class to him or her.

(2) A certificate shall be active until it is:

(A) revoked under subsection (d) of this section;

(B) replaced by a certificate of a higher class; or

(C) inactivated under subdivision (c)(3) of this section.

(3) The certificate of an operator who ceases to be employed in the field of wastewater treatment shall become inactive two years after the date his or her last such employment terminated.

(4) An operator whose certificate has become inactive pursuant to subdivision (c)(3) of this section may apply for reissuance of a certificate. Upon fulfillment by such operator of the requirements of section 22a-416-4 of the Regulations of Conecti-

cut State Agencies and this section, the commissioner shall reissue a certificate to such operator.

(5) An individual who:

(A) is not employed as an operator in Connecticut;

(B) holds a current foreign certificate; and

(C) wishes to accept employment as an operator in Connecticut may obtain a certificate upon application therefor without examination if:

(i) such foreign certificate represents an operator certification class which the commissioner deems equivalent to the Connecticut class for which such individual seeks certification;

(ii) the individual meets the requirements of subsections (b) and (c) of section 22a-416-4 of the Regulations of Connecticut State Agencies;

(iii) to obtain such foreign certificate, the individual passed a written examination proctored under the authority of the applicable state, territory or possession of the United States;

(iv) the owner of the Connecticut wastewater treatment facility at which such individual seeks employment as an operator verifies to the commissioner in writing that such owner has offered employment to the individual conditioned upon the individual's receipt of a certificate under this section; and

(v) the individual submits with his or her application an application fee in accordance with subdivision (a)(4) of this section.

(6) An operator who obtains a reciprocal certificate to take employment as a chief, shift, or process control operator at a Connecticut wastewater treatment facility shall continue in such position for at least one year or such certificate shall be deemed null and void on the date such employment terminates.

(7) Any individual who is employed at a Connecticut wastewater treatment facility and seeks higher class certification than his or her current certification may not obtain such higher certification without passing the applicable examination in Connecticut.

(d) **Revocation of Certificates**

The commissioner may, in accordance with chapter 54 of the general statutes and sections 22a-3a-5 and 22a-3a-6 of the Regulations of Connecticut State Agencies, revoke an operator's certificate if such operator:

(1) obtained such certificate through fraud or misrepresentation or by submitting inaccurate, misleading, or incomplete information;

(2) has engaged in fraud or misrepresentation, including but not limited to the falsification of any discharge monitoring report or monthly operating report;

(3) did not exercise reasonable care, judgement, or ability in the performance of his or her duties as an operator;

(4) fails to properly perform his or her duties as an operator; or

(5) was previously issued a certificate when in fact he or she did not meet the requirements for that certificate.

(Effective July 13, 1993; amended June 5, 2000)

Sec. 22a-416-6. Requirements for owners of wastewater treatment facilities

(a) **General**

(1) Upon the commissioner's request, the owner of a wastewater treatment facility shall provide in writing to the commissioner the name of each chief operator, shift operator, and process control operator employed at such facility.

(2) The owner of a wastewater treatment facility shall notify the commissioner in writing prior to any additions or deletions of unit processes or unit operations listed in appendix A.

(b) **Requirements for employing qualified operators, including chief, shift, and process control operators.**

The owner of a wastewater treatment facility shall assure compliance with the following requirements:

(1) Except as provided in subdivision (b)(2) of this section, the owner shall employ a chief operator certified at the class of such facility or higher, determined in accordance with subsection (b) of section 22a-416-3 of the Regulations of Connecticut State Agencies, and such operator shall be present at such facility for the following minimum numbers of hours each day of a five-day work-week:

Class of facility	Design flow rate of facility (Million Gallons/Day)	Minimum number of hours of the chief operator for on-site operations
I	≤0.20	2
II	≤0.20	2
III	≤0.15	3
I,II	>0.20	7*
III	>0.15	7*
IV	any	7*

***The Commissioner may give credit to a chief operator for hours of on-site operations for reasonable time he or she spends in training, conferences, meetings, and other administrative duties related to wastewater treatment, and in activities related to operation and maintenance of the collection system, if the collection system is under the chief operator's supervision.**

(2) At a wastewater treatment facility with a design flow rate of less than 0.025 mgd, a chief operator may be present for fewer than the minimum number of hours required by subdivision (b)(1) of this section only with the prior written approval of the commissioner. To obtain such approval, the owner shall demonstrate to the satisfaction of the commissioner that the owner would be able to properly operate such facility and comply with all pertinent requirements of chapter 446k of the general statutes if the chief operator were present for fewer than such required hours. A request for approval under this subdivision shall include, without limitation, a description of duties and tasks performed by each operator during a typical workday and class of the operator certification of each operator employed at the facility.

(3) At a wastewater treatment facility where the chief operator is not normally present during any operating shift, the owner shall employ a shift operator who is certified no lower than one class below the classification of the facility during such shift.

(4) Within 24 months of the adoption of the wastewater treatment operator regulations, at a wastewater treatment facility with a design flow rate greater than or equal to 150,000 gallons per day, the owner shall employ a shift operator certified no lower than one class below the classification of the facility during every shift when the chief operator is normally present.

(5) The owner of a wastewater treatment facility may employ a process control operator certified no lower than one class below the classification of the facility.

(6) An owner shall not employ as an operator any individual who has not been certified at a minimum of Class I as required in subsection (a) of section 22a-416-7 of the Regulations of Connecticut State Agencies.

(7) Within 14 days after a chief operator, shift operator, or process control operator begins or terminates employment in such capacity at a wastewater treatment facility, the owner thereof shall notify the commissioner in writing of such fact. Direct responsible charge experience shall not start to accumulate for such chief operator, shift operator, or process control operator until the date the commissioner receives such notification from the owner.

(8) If either the chief operator or shift operator of a wastewater treatment facility:

(A) ceases to be employed by such facility or

(B) is or will be absent from such facility for more than 30 consecutive days,

The owner of such facility shall notify the commissioner in writing of the designation of an acting chief operator or shift operator within 14 days. An individual may act as chief operator under the wastewater treatment operator regulations only if such individual is certified at no lower than one class below the class of the facility. An individual may act as a shift operator under the wastewater treatment operator regulations only if such individual is certified at no lower than two classes below the class of the facility. The owner of such facility may continue to operate such facility without a chief operator or shift operator for no longer than 90 days, except that upon good cause shown in writing by such owner, the commissioner may extend in writing such 90 day limit for no more than an additional 275 days.

(9) If either the chief operator or shift operator of a wastewater treatment facility is or will be absent from such facility for less than 30 consecutive days, the owner may continue to operate the facility provided that the owner designates an acting chief operator or acting shift operator, as applicable, during such absence. An individual may act as chief operator under the wastewater treatment operator regulations only if such individual is certified at no lower than one class below the class of the facility. An individual may act as a shift operator under the wastewater treatment regulations only if such individual is certified at no lower than two classes below the class of the facility. If the owner does not employ an individual qualified under this subdivision to act as chief operator or shift operator in the event that the regularly employed chief operator or shift operator is absent for a period of up to 29 days, the owner may continue operating the facility during such absence only if the owner designates the operator with the highest available certification at the facility to act as chief or shift operator during such absence.

(10) Within three years of the adoption of the Wastewater Treatment Operator Regulations, owners of wastewater treatment facilities utilizing biological processes to treat exclusively industrial wastewater shall comply with the requirements of this section.

(11) If the adoption of section 22a-416-3 of the Wastewater Treatment Operator Regulations results in reclassification of a wastewater treatment facility to a higher classification, within three years of such adoption the owner of such facility shall comply with the requirements of this section.

(Effective June 25, 1984; amended June 5, 2000)

Sec. 22a-416-7. Requirements for operators of wastewater treatment facilities

(a) Any individual initially employed after the effective date of the wastewater treatment operator regulations as an operator other than a chief operator, shift operator, or process control operator at a wastewater treatment facility shall obtain a Class I certificate or higher within 24 months of beginning employment at such facility. Any individual who fails to obtain at least a Class I certificate within such time shall be ineligible to act as an operator after such time.

(b) Any individual whose employment as a chief operator, shift operator, or process control operator at a wastewater treatment facility commences or terminates after the effective date of the Wastewater Treatment Operator Regulations shall notify the commissioner in writing of such commencement or termination within 14 days thereof.

(c) Operator-in-training status for the applied class does not qualify an applicant to be a certified operator within that class.

(Effective June 25, 1984; amended June 5, 2000)

Sec. 22a-416-8. Requirements for chief operators of wastewater treatment facilities

(a) A chief operator may not perform the duties of a chief operator during a single shift at more than one Class IV facility, at more than one Class I or II facility with a design flow greater than 0.20 mgd, or at more than one Class III facility with a design flow greater than 0.15 MGD.

(b) A chief operator may perform the duties of a chief operator at more than one wastewater treatment facility only in accordance with the table below and only with the written approval of the commissioner. To obtain such approval, a chief operator shall submit a detailed operations and maintenance plan demonstrating to the commissioner's satisfaction that such chief operator could properly perform his or her other duties at each of the subject facilities and assure compliance with all pertinent requirements of chapter 446k of the general statutes if the approval sought were granted.

Daytime Shift				Other Than Daytime Shift
Class of facility	Design flow rate (Million Gallons/Day)	Minimum number of hours during which the chief operator shall be present at each facility on each day of a five-day work week	Number of facilities at which chief operator is employed	Number of Class I or II facilities with a design flow rate of ≤0.20 MGD and/or Class II facilities at which a chief operator may be employed during one non-daytime shift
I	≤0.20	2	3	1
II	≤0.20	2	3	1
III	≤0.15	3	2	1
I, II	>0.20	7*	1	1
III	>0.15	7*	1	1
IV	any	7*	1	1

***The Commissioner may give credit to a chief operator for hours of on-site operations for reasonable time he or she spends in training, conferences, meetings, and other administrative duties related to wastewater treatment, and in activities related to operation and maintenance of the collection system, if the collection system is under the chief operator's supervision.**

(c) A chief operator may work at more Class I, Class II, or Class III wastewater treatment facilities, with design flow rates of ≤0.15 mgd, than allowed under subsection (b) of this section only with the commissioner's written approval. To obtain such approval a chief operator shall demonstrate to the commissioner's satisfaction that such chief operator could properly perform his or her duties at each of the subject facilities and assure compliance with all pertinent requirements of chapter

446k of the general statutes if the approval sought were granted. A request for approval under this subdivision shall include, without limitation, a description of each workday during a workweek, including the times during which the said chief operator is or would be present at each of the subject facilities, and information about the travel times between such facilities.

(d) With the exception of a Class IV chief operator who seeks approval to operate both a Class IV facility during a daytime shift and operating a Class I or II facility with a design flow rate of ≤0.20 mgd or a Class III facility with a design flow of ≤0.15 mgd during a non-daytime shift, the commissioner shall not grant approval under subsections (b) or (c) of this section unless the chief operator seeking such approval is certified under section 22a-416-4 of the Regulations of Connecticut State Agencies at least one class higher than the highest class of wastewater treatment facility of which he or she is chief operator at the time he or she requests such approval.

(e) The commissioner shall not grant a request for approval under subsections (b) or (c) of this section unless such request is accompanied by a statement, on a form supplied by the commissioner, by the owner of each wastewater treatment facility which is the subject of such request certifying that such owner employs or wants to employ the requester as a chief operator at such facility.

(f) The commissioner shall review any approval under this section at least once every five years and may withdraw such approval at any time if, the chief operator does not properly perform his or her duties at each of the subject facilities or assure compliance with pertinent requirements of chapter 446k of the general statutes.

(Effective June 25, 1984; amended June 5, 2000)

Sec. 22a-416-9.

Repealed, June 5, 2000.

Sec. 22a-416-10. Advisory committee

(a) **Committee appointment and makeup**

The commissioner shall appoint an advisory committee composed of no less than eight and no more than twelve members as follows: two shall be employees of the department whose regular duties involve the planning, design and construction of wastewater treatment facilities, at least one shall be an educator experienced in the training of wastewater treatment facility operators, and the remaining members shall be operators certified at the time of such appointment under section 22a-416-4 of the Regulations of Connecticut State Agencies.

(b) **Term of appointment**

The department employees and educator members of the advisory committee shall be appointed for an unlimited period of time. All other members of the advisory committee shall be appointed for a term of up to three years. The commissioner may reappoint any such member to a second term of up to three years, but in no case shall such member serve more than six consecutive years. The commissioner may revoke any individual's appointment as a member for failure to attend a majority of the scheduled meetings of the advisory committee or for failure to provide assistance in performing the duties of the committee as described in subsection (d) of this section.

(c) **Compensation**

The advisory committee shall serve without compensation and shall convene at the discretion of the commissioner.

(d) **Duties of the committee**

The advisory committee shall advise and assist the commissioner in administering the certification program by:

(1) reviewing the classifications of particular wastewater treatment facilities;

(2) reviewing applications for certification and for revalidation of certificates under subsection (c) of section 22a-416-5;

(3) making recommendations to the commissioner on the evaluation and classification of new and modified wastewater treatment facility equipment and processes;

(4) encouraging qualified individuals to become certified;

(5) encouraging owners of wastewater treatment facilities to promote and facilitate advanced certification of their employees;

(6) promoting wastewater treatment facility operator training programs;

(7) commenting on the proposed revocation of a certificate;

(8) reviewing reciprocal certification requests by operators from other states;

(9) reviewing the proposed examinations;

(10) performing related duties as requested by the commissioner;

(11) reviewing operations and maintenance plans under section 22a-416-6 and section 22a-416-8; and

(12) Reviewing extension of the 90 (ninety) day limit under subdivision (b)(8) of section 22a-416-6.

APPENDIX A

Size of facility (2-20 points)		Points
Maximum population equivalent (P.E.) served on peak day	1 point per 10,000 P.E. or part thereof, for a maximum of 10 points	_____
Design flow	1 point per MGD or part thereof, for a maximum of 10 points	_____
Land disposal (evaporation)	2	_____
Subsurface disposal	4	_____
Variation in strength and/or flow of raw wastewater (slight to extreme) (0-6 points)		
Variations do not exceed those normally present	0	_____
Recurring variations of 100% to 200% from norm	2	_____
Recurring variations of more than 200% from norm	4	_____
Raw wastes that impair biological treatment processes	6	_____
Pretreatment plant processes utilized		
Pumping of main flow other than recycle flows at any point within the facility	3	_____
Screening or comminution	1	_____
Grit removal	3	_____
Equalization	1	_____
Effluent pumping when receiving infiltration (e.g. stream flooding)	3	_____
Combined Sewer Overflow		
Storage	1	_____
Treatment	3	_____

Primary treatment utilized		
Primary clarifiers	5	_____
Combined sedimentation/digestion (Imhoff tanks)	5	_____
Micro screening or other physical treatment	3	_____
Trickling filters used as roughing filters with recycle and intermediate clarifiers	5	_____
Trickling filters used as roughing filters with recycle or intermediate clarifiers	3	_____
SCADA		
Operational	6	_____
Monitoring	2	_____
Secondary treatment utilized		
Trickling filter or rotating biological contractor with secondary clarifiers	10	_____
Activated sludge with secondary clarifiers	15	_____
Activated sludge without primary clarifiers including extended aeration, sequential batch reactors and oxidation ditches	18	_____
Stabilization ponds without aeration	5	_____
Aerated lagoon	8	_____
Advanced treatment utilized		
Post aeration (mechanical)	2	_____
Direct recycle and reuse	6	_____
Polishing pond	2	_____
Chemical phosphorus removal	4	_____
Biological phosphorus removal	6	_____
Nitrification processes	6	_____
Nitrification and denitrification processes	9	_____
Denitrification filter	6	_____
Ion exchange	10	_____
Reverse osmosis or electrodialysis	15	_____
Chemical recovery or carbon regeneration	4	_____
Mechanical filtration	10	_____
Intermittent sand filters with gravity under drains	5	_____
Solids Handling		
Solids conditioning with polymers, ferric chloride or alum	2	_____
Thickening by means of:		
Gravity	2	_____
Mechanical (dissolved air flotation, gravity belt or centrifuge)	5	_____
Anaerobic digestion	10	_____
Aerobic digestion	6	_____
Evaporative sludge drying	2	_____
Mechanical dewatering	5	_____
Incineration, wet oxidation, or other solids reduction	12	_____

On-site disposal	2	_____
Composting (In vessel)	10	_____
Composting (static pile)	5	_____
Sludge storage	1	_____
Sludge pumping offsite	2	_____
Disinfection		
Chlorination or comparable disinfection	5	_____
Chlorination/Dechlorination	8	_____
On-site generation and application of disinfectant	5	_____
Ultraviolet light	5	_____
Odor control		
Biofilter	3	_____
Adsorption with activated carbon or equal	3	_____
Wet scrubber	6	_____
Thermal destruction with catalytic process	6	_____
Odor reducing sprays	2	_____
Chemical Additives		
Septage treatment system	3	_____
Sedimentation additives	2	_____
Nutrient removal	2	_____
Biological laboratory analysis		
Laboratory analysis performed outside the facility	0	_____
Laboratory analysis performed at the facility:		
Membrane filter	2	_____
Use of fermentation tubes or any dilution method using a fecal coliform bacteria determination	3	_____
Identification and counts of biota by percent relative abundance	3	_____
Chemical and/or Physical laboratory analysis		
Laboratory analysis performed outside the facility	0	_____
Laboratory analysis performed at the facility:		
Push-button or visual methods for simple analysis (e.g. settleable solids)	2	_____
Additional analysis including dissolved oxygen, biological oxygen demand, chemical oxygen demand, gas analysis, titration, solids, and volatile content	3	_____
More advanced analyses including specific constituents, nutrients, total oils, phenols, or use of highly sophisticated instrumentation including atomic absorption, gas chromatography	3	_____
Total points:		_____

(Effective June 25, 1984; amended June 5, 2000)

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Water Pollution Control

Sec. 22a-430-1. Delegation of permitting authority for water pollution control

(a) **Definitions**

''Agent'' means any state agency other than the Department of Environmental Protection, any municipal water pollution control authority, any municipal building official or municipal or district director of health.

''Commercial subsurface sewage disposal system'' means a subsurface sewage disposal system receiving domestic sewage from any non-residential building or buildings on the same lot or within the same project as the building or buildings served.

''Commissioner'' means the Commissioner of Environmental Protection.

''Director'' means the Director of the Water Compliance Unit of the Department of Environmental Protection.

''Domestic sewage'' means sewage that consists of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surfaces or yard drains.

''Groundwater control system'' means a system of subsurface drains and in some cases subsurface pipes which are installed to reduce the amount of groundwater entering the soil below a leaching system from a higher elevation and upon which the operation of the leaching system is dependent.

''House sewer'' means a sewer pipe extending from within the building served to the septic tank.

''Household subsurface sewage disposal system'' means a subsurface sewage disposal system receiving domestic sewage from a single residential building and/or associated outbuildings where such a system is located on the same lot as the building served or on an easement available for the installation, operation and maintenance of the system and which is recorded on the appropriate land records.

''Leaching system'' means a structure, excavation or other facility designed to allow settled sewage to percolate into the underlying soil, without overflow, and to mix with the groundwater.

''Lot'' means a parcel of land, the boundaries of which are described in a deed recorded on the appropriate land records. Any such parcels which are contiguous and are owned by the same person or municipality shall be considered one lot.

''Non-residential building'' means any commercial, industrial, institutional, public or other building not occupied as a dwelling, including hotels and motels.

''Open watercourse'' means a well-defined surface channel, produced wholly or in part by a definite flow of water and through which water flows continuously or intermittently, and includes any ditch, canal, aqueduct or other artificial channel for the conveyance of water to or away from a given place; or any lake, pond, or other surface body of water intermittently or permanently covered with water, fresh or tidal.

''Outbuilding'' means any structure, located on the same lot as a residential building, which may be served by a subsurface sewage disposal system or a sewer service connection but which cannot be reasonably separated from the residential building with which it is associated and sold as a separate residential building.

''Public sewer'' means a sewer which serves a number of buildings at least one of which is a residential building with or without associated outbuildings.

''Residential building'' means any house, apartment, trailer or mobile home or other structure occupied by individuals permanently or temporarily as a dwelling place.

''Septage'' means any water or material withdrawn from a septic tank which is used to treat domestic sewage.

''Septic tank'' means a watertight receptacle designed and constructed so as to permit settling of solids, the digestion of organic matter and the discharge of settled sewage.

''Sewer service connection'' means a sewer pipe or pipes extending from within the building served to a public sewer.

''Sewerage'' means sewers and associated sewage disposal systems.

''Subsurface drain'' means any pipe or other subsurface conveyance to which groundwater is transported during any season of any year.

''Subsurface pipe'' means a pipe which has no loose or open joints, perforations, slots or porous openings which are intended to allow sewage or water to escape from or water to enter the pipe.

''Subsurface sewage disposal system'' means a system consisting of a house sewer, a septic tank followed by a leaching system, any necessary pumps or siphons, and any groundwater control system on which the operation of the leaching system is dependent.

(b) Delegation of authority to issue permits, approvals, or orders or to hold public hearings.

(1) (A) The Commissioner may by agreement delegate authority to issue permits, approvals or orders or to hold public hearings in accordance with Section 22a-430 (f) and Section 22a-2 (b) (2) of the Connecticut General Statutes, as amended, for various categories of discharge to any agent as defined in subsection (a) of this section; and the Commissioner hereby delegates authority to the Commissioner of Health Services in accordance with Section 22a-430 (g) of the Connecticut General Statutes to issue permits, approvals, and to hold public hearings for Categories I and II. Categories I and II are hereby exempted from the requirements for public notice contained in Section 22a-430 (b) of the Connecticut General Statutes.

(B) The Commissioner may limit the scope of review by any delegated agent other than the Commissioner of Health Services to those areas in which the agent demonstrates his or her ability to provide for prompt, thorough processing of permits, approvals, or orders and to insure compliance with all statutes and regulations administered by the Commissioner and directives of the Commissioner, applicable to any category of discharge other than Category I and II.

(2) (A) Category I includes discharges of 5,000 gallons per day or less of domestic sewage to any one lot through one or more household subsurface sewage disposal systems.

(B) Category II includes discharges of 5,000 gallons per day or less of domestic sewage to any one lot through one or more commercial subsurface sewage disposal systems.

(c) **Delegation process for other than category I and II**

(1) Either the Commissioner may initiate the delegation process by letter to any prospective agent stating his or her intent to delegate and requesting the completion of an information form as provided by the Commissioner, or the prospective agent may initiate the delegation process by delivering to the Commissioner a completed information form. The information form shall set forth the name of the proposed

agent, the type or scope of the delegation proposed, the geographical area to be covered and such other information as the Commissioner may require.

(2) The Commissioner shall review the information form and if he or she determines that the agent is capable of providing for prompt, thorough processing of permits, approvals, or orders, holding public hearings and insuring compliance with all statutes and regulations administered by the Commissioner and directives of the Commissioner applicable to any category of discharge, he or she may enter into a delegation agreement with the agent.

(3) The delegation agreement shall provide for delegation of authority to issue permits, approvals or orders or to hold public hearings for designated categories of discharges and for reporting to the Commissioner on action taken, and may contain such other terms and conditions as the Commissioner may reasonably require.

(d) **Listing of delegated agents**

The Director shall maintain a listing of agents to whom the authority of the Commissioner has been delegated in accordance with these regulations. Such listing shall be maintained in a manner that additions or deletions are made as they occur. The listing may be subdivided with respect to categories of discharges and/or geographical areas at the discretion of the Director. The complete listing or any portion thereof shall be made available to interested parties on request.

(e) Discharges of domestic sewage through subsurface sewage disposal systems

(1) General Provisions:

(A) This subsection applies only to discharges of domestic sewage in volumes of 5,000 gallons per day or less through a subsurface sewage disposal system.

(B) Any expansion or reconstruction of a subsurface sewage disposal system or portion thereof other than a maintenance repair, any increase in the volume of average daily discharge over that anticipated in system design, or any change from seasonal to year-round use shall be considered a new discharge and subject to the provisions of Section 22a-430 of the Connecticut General Statutes.

(C) The Commissioner of Health Services shall periodically investigate and review those sources of discharge which are operating pursuant to any permit issued pursuant to the authority delegated in these regulations and shall report to the Director any discharge from a subsurface sewage disposal system which cannot be corrected in compliance with the minimum requirements established by the Commissioner of Health Services pursuant to Section 22a-430 (g) of the Connecticut General Statutes.

(D) No permit shall be issued pursuant to the authority delegated to the Commissioner of Health Services by these regulations for a discharge from a subsurface sewage disposal system, the operation of which is dependent upon a groundwater control system, unless:

(i) the discharge from the groundwater control system is to an open watercourse, or

(ii) the discharge from the groundwater control system is to a subsurface pipe or subsurface drain owned and maintained by a municipality as defined in Section 22a-423 of the Connecticut General Statutes or by an agency of the state or federal government, or

(iii) for residential buildings, the discharge from the groundwater control system is to the ground surface on the same lot as the subsurface sewage disposal system or on an easement available for the installation, operation, and maintenance of the system which is recorded on the appropriate land records.

(E) A groundwater control system may be constructed to serve more than one lot provided the rights and obligations of the owners to maintain the system are established by a permanent covenant approved by the Commissioner and recorded on the land records.

(F) No permit shall be issued pursuant to the authority delegated to the Commissioner of Health Services by these regulations for a discharge which is subject to the provisions of Part C of the Safe Drinking Water Act (42 USC 300f).

(2) General Procedural Requirements;

(A) An applicant for a permit to discharge domestic sewage through a subsurface sewage disposal system shall comply with the procedures established by the Commissioner of Health Services pursuant to Section 22a-430 (g) of the Connecticut General Statutes.

(Effective December 18, 1984)

Sec. 22a-430-2. Exemption from public notice

(a) **Definitions**

The definitions of the following terms used in this section shall be the same as the definitions in Section 22a-430-1 of the Regulations of Connecticut State Agencies, as amended: commissioner, domestic sewage, residential building, septage, and sewerage.

(b) In addition to the exemptions specified in Section 22a-430-1 (b) of the Regulations of Connecticut State Agencies, the following categories, types or sizes of discharges are considered not likely to cause substantial pollution and shall therefore be exempted from the requirement of notice prior to the Commissioner approving or denying an application for a permit to initiate a discharge to the waters of the state:

(1) Discharges of domestic sewage to a municipally owned sewerage system in quantities less than one percent (1%) of the average daily design flow of a sewage treatment facility which has been issued a permit by the Commissioner pursuant to Chapter 446k of the Connecticut General Statutes;

(2) Discharges to a municipally owned sewerage system of less than 5,000 gallons per day of manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, wastewater from commercial vehicle washing or building floor drains;

(3) Discharges of water from heating or cooling equipment serving a single residential building;

(4) Discharges of domestic sewage or septage from vehicles to facilities which have been issued a permit by the Commissioner pursuant to Chapter 446k of the Connecticut General Statutes.

(c) Nothing in this section shall be construed as affecting the obligation of any person or municipality to comply with the requirements of the Federal Water Pollution Control Act or the Federal Safe Drinking Water Act.

(Effective December 18, 1984)

Sec. 22a-430-3. General conditions applicable to water discharge permits

(a) **Definitions.** The following definitions shall apply to this section and section 22a-430-4 of the Regulations of Connecticut State Agencies.

(1) The definitions of the following terms used in this section shall be the same as the definitions in section 22a-430-6 of the Regulations of Connecticut State Agencies, as amended: agricultural activities; applicant; application; bakery and

confectionary wastewaters; beverage wastewaters; blowdown from heating and cooling equipment; building floor drain wastewaters; clay, gypsum, refractory, and ceramic product wastewaters; coal gasification wastewaters; coal liquification wastewaters; concrete product wastewaters; cooling water (non-contact); department; discharge point; dredging; edible oils wastewaters; explosives manufacturing wastewaters; fish hatchery and farm wastewaters; furniture manufacturing wastewaters; ground water contamination recovery system; gum and wood chemical wastewaters; hazardous waste; hazardous waste disposal area; hazardous waste facility; incinerator; miscellaneous food product wastewaters; on-site; paint and ink formulation; permit; photographic equipment, supplies wastewaters; photographic processing wastewaters; printing and publishing wastewaters; residential building; rubber processing wastewaters; septage; septage disposal area; shale oil wastewaters; shipbuilding wastewaters; shore receptor and bulk terminal wastewaters; soap, detergent and cosmetic manufacturing wastewaters; solid waste; solid waste disposal area; stormwater; swimming pool backwash; transfer station; transportation wastewaters; tumbling and cleaning of parts wastewaters; water production wastewaters.

(2) The definitions of the following terms used in this section are contained in section 22a-423 of the Connecticut General Statutes: commissioner; waters; wastes; pollution; person; municipality; discharge.

(3) As used in this section and section 22a-430-4 of the Regulations of Connecticut State Agencies:

''Acute Toxicity'' means an adverse effect on aquatic life such as death or debilitation caused by short-term exposure to a substance or combination of substances.

''Aliquot sample'' means a grab sample taken for the purpose of combining with other grab samples to make a composite sample.

''Average'' means the arithmetic average.

''Average daily concentration'' means the average concentration of a substance in a daily composite sample.

''Average daily flow'' means the average of all total daily flows measured during any calendar month.

''Average daily quantity'' means the average quantity of waste generated during an operating day.

''Average monthly concentration'' means the average concentration of a substance as measured by the average of all daily composite samples or grab sample averages taken during any calendar month.

''Average monthly discharge limitation'' means the highest allowable average of all daily discharges during any calendar month.

''Average weekly concentration'' means the average concentration of all daily composite samples taken during any calendar week.

''Average weekly discharge limitation'' means the highest allowable average of a substance as measured by the average of all daily discharges during any calendar week.

''BAT'' means Best Available Technology Economically Achievable as specified in subparagraph (4) (A) (iii), (iv) and (vi) of subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''BCT'' means Best Conventional Pollutant Control Technology as specified in subparagraph (4) (A) (ii) of subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''Bioaccumulation'' means uptake and retention of substances by an organism from its surrounding medium and/or from food.

''BPT'' means Best Practicable Control Technology Currently Available as specified in subparagraph (4) (A) (i) of subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''Bypass'' means the diversion of wastes from any portion of the wastewater collection or treatment facilities.

''CFR'' means the Code of Federal Regulations. Each citation to ''CFR'' which is contained in this section and section 22a-430-4 of the Regulations of Connecticut State Agencies shall be considered to incorporate the cited provision by reference as if fully set forth therein. Each cited provision is incorporated as it existed on the effective date of the provision of this section and section 22a-430-4 of the Regulations of Connecticut State Agencies which contains the citation.

''Chronic Toxicity'' means an adverse effect on aquatic life such as reduced reproductive success or growth, or poor survival of sensitive life stages, caused by long-term exposure to a substance or combination of substances.

''Clean Water Act'' or ''CWA'' means the Federal Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) 33 U.S.C. 1251 *et seq.* and applicable regulations promulgated thereunder. Unless otherwise apparent from the context, each citation to CWA, or to requirements promulgated thereunder, which is contained in this section or section 22a-430-4 of the Regulations of Connecticut State Agencies shall be considered to incorporate the cited provision by reference as if fully set forth therein. Each provision which is incorporated by reference is incorporated as it existed on the effective date of the provision of this section and section 22a-430-4 of the Regulations of Connecticut State Agencies which contains the citation.

''Composite Sample'' means a sample collected over a specified period of time in order that the results are representative of the monitored activity over the same time period.

''Connecticut Water Quality Standards'' means the standards adopted by the commissioner under section 22a-436 of the Connecticut General Statutes, as amended.

''Continuous Discharge'' means a discharge which occurs without interruption throughout the operating day, except for infrequent stoppages for maintenance, process changes, or other similar activities.

''Conventional Pollutants'' means Biochemical Oxygen Demand (Five Day), Oil and Grease, Total Suspended Solids—Nonfilterable, Fecal Coliform and pH.

''Cyanide, Amenable'' means cyanide which is amenable to destruction by chlorine.

''Daily composite'' means (1) a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of no more than sixty (60) minutes and combined proportionally to flow, or (2) a composite sample continuously collected over a full operating day proportionally to flow. Upon submission of documentation by the applicant satisfactory to the commissioner that a discharge is of consistent effluent quality, the commissioner may allow equal sampling intervals of up to four (4) hours for a daily composite sample.

''Daily Toxicological Effluent Limit'' means any limitation established to regulate the concentration or quantity of acute or chronic toxicity of a compound, mixture of compounds, or effluent discharge in a twenty four (24) hour period.

''Day'' means the twenty four hour period commencing at 12:00 a.m., and, unless specified as ''business day'' shall mean calendar day.

''Design Flow Rate'' means the flow rate on which the design of a particular wastewater collection, treatment or disposal system or part thereof is based, in order to allow compliance with chapter 446k of the Connecticut General Statutes, this section and section 22a-430-4 of the Regulations of Connecticut State Agencies.

''Dewatering Wastewaters'' means uncontaminated wastewaters generated by the pumping of ground waters during construction or excavation activities.

''Director'' means the Director of the Water Compliance Unit of the Department of Environmental Protection.

''Discharge Toxicity Evaluation'' means a structured scientific analysis of the existing and potential acute and chronic toxicity and discharge rate of a discharge relative to available dilution in the receiving water.

''Domestic sewage'' means sewage that consists of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surfaces or yard drains.

''Effluent limitation'' means (1) any numerical limitation imposed by the commissioner on quantities, discharge rates or concentrations of any water, substance or material discharged to the waters of the State or (2) any limitation imposed by the commissioner on any other measure of the quality or quantity of the discharge.

''Environmental Protection Agency'' or ''EPA'' means the United States Environmental Protection Agency.

''Existing Discharge'' means a discharge which existed within the year preceding the effective date of this section or which was authorized by a valid State or NPDES permit on the effective date of this section. An existing discharge need not have operated continuously, and may include intermittent, seasonal or batch type discharges and discharges which existed only over certain times of the day.

''Furniture Refinishing Rinsewaters'' means wastewaters generated by the rinsing of furniture after chemical stripping, cleaning or refinishing, not including concentrated solutions from these processes.

''Generic Substance'' means a group of elements or compounds which, because of their similar effects on receiving waters or other characteristics, are appropriately identified by measurement of a common property rather than measurement of the specific elements or compounds.

''Grab sample'' means an individual sample collected in less than fifteen minutes.

''Grab sample average'' means the arithmetic average of all grab sample analyses. Grab samples shall be collected at least once every four hours over a full operating day for as long as a discharge exists on that day (minimum of two grab samples per day).

''Ground waters'' means those waters of the state which naturally exist or flow below the surface of the ground.

''Hazardous Substance'' means any substance listed in either 40 CFR Part 261 Appendix VIII, 40 CFR 116.4 or Appendix B of Section 22a-430-4 of the Regulations of Connecticut State Agencies.

''High Level Radioactive Waste'' means (A) the highly radioactive material from reprocessing of spent nuclear fuel including liquid waste products generated directly in reprocessing and any solid waste derived from such liquid waste that contain

fission products in sufficient concentration; and (B) other highly radioactive material that the U.S. Department of Energy determines by rule requires permanent isolation.

''Hydrostatic Pressure Testing Wastewaters'' means wastewaters generated by the hydrostatic pressure testing of water, sewer, or natural gas pipelines.

''Injection'' means the subsurface emplacement of fluids by gravity or greater pressure through a well.

''kg/day'' means kilograms per day.

''LC50'' means the concentration of a substance, mixture of substances, or discharge which causes mortality to fifty percent of the test organisms in an acute toxicity test.

''lbs/day'' means pounds per day.

''Leachate indicators'' means the following substances: total dissolved solids, total suspended solids, alkalinity, total dissolved iron, total dissolved manganese, ammonia nitrogen (as nitrogen), nitrate nitrogen (as nitrogen), sodium, chlorides, volatile organic compounds (as determined by methods 8010 and 8020 described in EPA publication SW 846 entitled *Test Methods for Evaluating Solid Waste*) and twenty day biochemical oxygen demand.

''Listed substance'' means any substance for which analytical results or estimates are included in a permit application.

''Maximum concentration'' means the maximum concentration at any time as determined by a grab sample.

''Maximum daily concentration'' means the maximum concentration as measured in a daily composite sample or a grab sample average.

''Maximum Daily Flow'' means the greatest volume of wastewater to be discharged over an operating day, not to exceed the design flow rate.

''Maximum daily quantity'' means the maximum quantity of waste generated during an operating day.

''mg/l'' means milligrams per liter.

''Minor Blowdown from Heating and Cooling Equipment'' means wastewaters generated by heating and cooling equipment that recycles water, provided that the discharge of such wastewaters has a maximum daily flow of no greater than 500,000 gallons per day.

''Minor Heat Pump Wastewaters'' means wastewaters generated by the withdrawal of ground waters or surface waters for heating or cooling of a building, provided the discharge of such wastewaters has a maximum daily flow of no greater than 500,000 gallons per day.

''Minor Non-contact Cooling Water'' means wastewater which has been used for cooling purposes, does not come into direct contact with a product or process, and has a maximum daily flow of no greater than 500,000 gallons per day with a minimum dilution available in the receiving stream at seven day, ten year low flow of at least ten to one.

''Minor Photographic Processing Wastewaters'' means wastewater generated by the processing of photographic film, and having a maximum daily flow of no greater than 5,000 gallons per day.

''Minor Tumbling and Cleaning of Parts Wastewaters'' means wastewaters generated by processing of only aluminum or unfinished steel parts for the removal of particulate metal or for cleaning, where no acids or cyanides are used in the processing, and having a maximum daily flow of no greater than 5,000 gallons per day.

''Month'' means the period commencing at 12:00 a.m. on the first day of any calendar month and ending at 12:00 a.m. on the first day of the next calendar month.

''National Pollutant Discharge Elimination System'' or ''NPDES'' means the program for issuing, modifying, revoking, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318 and 405 of the Clean Water Act and Chapter 446k of the Connecticut General Statutes and regulations adopted thereunder.

''New Discharge'' means a discharge initiated after the effective date of this section which is not an existing discharge, or an increase of an existing discharge beyond permit conditions after the effective date of this section.

''New source'' means any building, structure, facility or installation from which there is or may be a discharge:

(1) the construction of which commenced

(A) After the date the current limitation applicable to such type of source was adopted in subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies, or

(B) After proposal of standards of performance in accordance with section 306 CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 CWA within one hundred twenty days of their proposal, and

(2) if a new source performance standard is independently applicable to it; and

(3) (A) which is constructed at a site at which no other discharge is located; or

(B) totally replaces the process or production equipment that causes the discharge at an existing facility; or

(C) whose processes are substantially independent of an existing facility at the same site, considering such factors as the extent to which the new process is integrated with the existing process and the extent to which the new facility is engaged in the same general type of activity as the existing facility.

'' 'N' Hour Average'' means the average of a minimum of ''N + 1'' measurements obtained at regular intervals during an ''N'' hour period.

''No Observable Acute Effect Level or NOAEL'' means the highest concentration of a substance or combination of substances which does not cause acute toxicity to aquatic organisms.

''NPDES Permit'' means a permit authorizing a discharge to the surface waters of the state either directly, or indirectly by means other than through a POTW or the ground waters, which is issued by the commissioner pursuant to section 22a-430 of the Connecticut General Statutes.

''NSPS'' means New Source Performance Standards as specified in subparagraph (4) (A) (vii) of subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''Operating day'' means that portion of a calendar day during which a discharge exists.

''pH'' means the negative logarithm of the hydrogen ion concentration.

''Pollutant'' means any water, substance or material for which the permit in question specifies an effluent limitation.

''Potable Water System Flushing Wastewaters'' means wastewaters generated by the periodic flushing of potable water systems using uncontaminated water.

''Privately Owned Treatment Works'' means a system which is not a POTW and which is used to collect, treat and/or dispose of only nondomestic sewage from any facility whose operator is not the operator of the treatment works.

''Process Wastewater'' means any wastewater which, during manufacturing, commercial, mining or silvicultural activities, comes into direct contact with, or results

from the production, use or handling of any process, raw material or intermediate or final product, byproduct or wasteproduct. This does not include cooling water (non-contact), domestic sewage, blowdown from heating and cooling equipment, stormwater, or wastewater from agricultural activities.

''PSES'' means Pretreatment Standards for Existing Sources as specified in subparagraph (4) (D) (i) of subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''PSNS'' means Pretreatment Standards for New Sources as specified in subparagraph (4) (D) (i) of subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''Publicly Owned Treatment Works'' or ''POTW'' means a system used for the collection, treatment and/or disposal of sewage from more than one lot as defined in section 22a-430-1 of the Regulations of Connecticut State Agencies and which discharges to the waters of the state and which is owned by a municipality or the state.

''Quarter'' means the calendar quarter beginning at 12:00 a.m. on the first day of January, April, July and October and ending at 12:00 a.m. on the first day of April, July, October and January, respectively.

''Radiator Repair Rinsewaters'' means wastewaters generated by the rinsing and pressure testing of vehicle radiators, not including concentrated cleaning solutions or boil tanks.

''RCRA'' means the Federal Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) and applicable regulations promulgated thereunder.

''Regional Administrator'' means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

''Safe Drinking Water Act'' or ''SDWA'' means the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.* and applicable regulations promulgated thereunder.

''Seven Day, Ten Year Low Flow'' means the lowest seven consecutive day mean stream discharge rate with a recurrence interval of ten (10) years.

''Severe property damage'' means substantial physical damage to property, damage to the collection system or treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources. Severe property damage does not mean economic loss caused by delays in production.

''SIC Code'' means Standard Industrial Classification code as specified in the Standard Industrial Classification Manual prepared by the United States Office of Management and Budget.

''State/EPA Agreement'' means an agreement between the Regional Administrator and the State, which coordinates EPA and State activities, responsibilities and programs including those under the CWA programs.

''State Permit'' means a permit authorizing a discharge to a POTW or to the ground waters of the state, which is issued by the commissioner pursuant to section 22a-430 of the Connecticut General Statutes.

''Substance'' means one or more elements, compounds or materials which, when added to water or wastewater, may alter the physical, chemical, biological or other characteristic of the water or wastewater. When used in this section and section 22a-430-4 of the Regulations of Connecticut State Agencies, the term substance includes heat, radiation, color and conventional pollutants.

''Surface Waters'' means those waters of the state which are not ground waters.

''Swimming Pool Cleaning Wastewaters'' means wastewaters generated by the chemical cleaning of the sidewalls of the swimming pool.

''Swimming Pool Draining Wastewaters'' means wastewaters generated by the draining of a swimming pool and does not include washwaters generated by the chemical cleaning of the sidewalls of the swimming pool.

''Total daily flow'' means the total flow of wastewater over an operating day.

''Toxic Substance'' means any substance listed as toxic in Appendix B or Appendix D of section 22a-430-4 of the Regulations of Connecticut State Agencies as amended.

''Treatment Facility'' means a system or any part thereof the purpose of which is to improve the chemical, physical or biological quality of a waste or wastewater discharge, including pretreatment facilities discharging to a POTW.

''Underground injection control program'' or ''UIC program'' means the program under Part C of the Safe Drinking Water Act, Chapter 446k of the Connecticut General Statutes and section 22a-430-8 of the Regulations of Connecticut State Agencies.

''Variance'' means any mechanism or provision which allows modification or waiver of a generally applicable requirement of this section or section 22a-430-4 of the Regulations of Connecticut State Agencies.

''Vehicle Service Floor Drain Wastewater'' means wastewater generated from floor washdown and drippings from vehicles in vehicle service areas.

''Week'' means the period commencing at 12:00 a.m. on Sunday and ending at 12:00 a.m. on the following Sunday.

''Zone of Influence'' means the spatial area or volume of receiving water flow within which some degradation of water quality or use impairment is anticipated to occur as a result of a discharge.

''Zone of Passage'' means the spatial area or volume of flow within which the concentration of any substance resulting from a discharge is below the level which would impede or prohibit the passage of free swimming and drifting organisms in the receiving waters.

(b) **General.**

(1) Applicable provisions.

(A) Each person or municipality holding a permit as of the effective date of this section, issued pursuant to section 22a-430 of the Connecticut General Statutes, shall comply with subsections (a) through (n) of this section, except subsection (j)(2), and with subsections (a), (b), (*l*), (o), (q), (r), (s) and (t) of section 22a-430-4 of the Regulations of Connecticut State Agencies. Existing permit conditions not superseded by said subsections shall remain in effect. However, the commissioner may, in accordance with sections 22a-6, 22a-7, or 22a-416 through 22a-471 of the Connecticut General Statutes, issue an order to a person or municipality holding a permit as of the effective date of this section to meet the requirements of this section and section 22a-430-4 of the Regulations of Connecticut State Agencies.

(B) Each person or municipality receiving a new or renewed permit pursuant to section 22a-430 shall comply with subsections (a) through (r) of this section and subsections (b), (*l*), (o), (q), (r), (s) and (t) of section 22a-430-4 of the Regulations of Connecticut State Agencies.

(C) Each new or renewed permit shall include all applicable provisions of this section and section 22a-430-4 of the Regulations of Connecticut State Agencies either expressly or by reference to a specific section.

(D) Provisions noted as ''for NPDES permits'' shall apply only to those persons or municipalities applying for or holding an NPDES permit. An applicable requirement is a statutory or regulatory requirement which takes effect prior to the issuance

of the final determination under subsection (i) of section 22a-430-4 of the Regulations of Connecticut State Agencies, except as specified in subparagraph (*l*) (3) (A) of section 22a-430-4 of the Regulations of Connecticut State Agencies, and, in the case of a permit modification, shall only include those requirements which apply to the terms and conditions to be modified.

(2) Signatory Requirements

(A) All permit applications and permit modification requests submitted to the commissioner shall be signed as follows:

(i) For a corporation: by a responsible corporate officer. For the purposes of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(ii) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(iii) For a municipality, State, Federal, or other public agency; by either a principal executive officer or a ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency. If the facility is a POTW, the chairperson of the Water Pollution Control Authority may sign these documents.

(B) All reports required by permits, and other information submitted to the commissioner shall be signed by a person described in subparagraph (A) of this section or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in subparagraph (A) of this section;

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, position or equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

(iii) The written authorization is submitted to the commissioner.

(C) If an authorization under this subsection is no longer accurate because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of this section must be submitted to the commissioner prior to or together with any reports or other information to be signed by an authorized representative.

(D) Any person signing a document under this section shall make the following certification:

''I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information

is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.''

(3) Duty to provide information. The commissioner may require any permittee to provide within a reasonable time any information which the commissioner may request to determine whether cause exists for modifying or revoking the permit or to determine compliance with the permit, including but not limited to copies of records required to be kept by the permittee.

(4) Permit Fees. The permittee shall pay the permit issuance and renewal fees as required by sections 22a-6 of the Connecticut General Statutes and 22a-430-6 of the Regulations of Connecticut State Agencies as amended, and shall pay the annual permit fees as required by sections 22a-6 of the Connecticut General Statutes and 22a-430-7 of the Regulations of Connecticut State Agencies as amended.

(5) Confidentiality.

(A) The confidentiality of information relating to secret processes or methods of manufacture or production which are claimed as confidential by the applicant in accordance with this subsection shall be maintained as provided in section 22a-6 of the Connecticut General Statutes as amended. However, as required by said section, claims of confidentiality for the following information will be denied:

(i) The name and address of any applicant or permittee;

(ii) For NPDES permits, UIC permits and permits for discharges to POTWs, permit applications, including any attachments, permits, and effluent data.

(B) All claims of confidentiality must be made at the time of submission by stamping or writing the words ''confidential business information'' on each page containing such information along with an indication on each page as to which specific information is confidential or in any other manner prescribed by the commissioner, and must be accompanied by a written statement of the reasons the information is to be kept confidential, including references to appropriate state and federal statutes and regulations.

(6) General Permits.

(A) The commissioner may issue a general permit to a permittee for one or more geographic locations for the following categories of discharge only for the types of receiving waters listed in subdivision (c) (25) of Section 22a-430-4 of the Regulations of Connecticut State Agencies: minor non-contact cooling water, minor heat pump wastewaters, stormwater, potable water system flushing wastewaters, hydrostatic pressure testing wastewaters, dewatering wastewaters, building floor drain wastewaters, groundwater contamination recovery system wastewaters, incinerator wastewaters, minor photographic processing wastewaters, swimming pool backwash wastewaters, swimming pool draining wastewaters, swimming pool cleaning wastewaters, power laundries-family and commercial, linen supply, diaper service, coin operated laundries & dry cleaners, carpet and upholstery cleaners, car washes, transfer station wastewaters, radiator repair facility rinsewaters, vehicle service floor drain wastewaters, minor tumbling and cleaning of parts wastewaters, furniture refinishing rinsewaters, and minor blowdown from heating and cooling equipment.

(B) Application for a general permit shall be made in accordance with subsection (c) of section 22a-430-4 of the Regulations of Connecticut State Agencies.

(C) General permits shall be exempt from the requirement for public notice specified in subsection (g) of section 22a-430-4 of the Regulations of Connecticut State Agencies provided that a notice is published at least once every five years for

each category of discharge to be covered by a general permit, such notice to include the following information:

(i) Name and description of each discharge category.

(ii) Effluent limitations, best management practices and other controls and requirements established for each discharge category in Section 22a-430-4 (s) (3) of the Regulations of Connecticut State Agencies.

(D) Monitoring requirements for the categories listed in subdivision (b) (6) (A) above are specified in the Monitoring Schedule referenced in subsection (j) of this section except that, notwithstanding subsection (j), the commissioner may limit the monitoring to one or more discharges that are representative of the other discharges listed on the permit.

(E) The commissioner may, on request of any person or municipality or on his or her own initiative, require a person or municipality holding a general permit to apply for and obtain an individual permit. Upon issuance of an individual permit, the general permit shall automatically expire. A person or municipality holding an individual permit may request that such permit be replaced by a general permit. Upon issuance of a general permit, the individual permit shall automatically expire. Any request for a change in permit under this subparagraph shall be on forms provided or approved by the commissioner and shall include such information as he or she requires.

(7) Time limitations. Time limitations placed upon actions of the commissioner by this section or section 22a-430-4 of the Regulations of Connecticut State Agencies shall be directory only.

(c) **Inspection and entry.** The commissioner or his or her authorized representative may take any actions authorized by sections 22a-6 (5), 22a-425 or 22a-336 of the Connecticut General Statutes as amended.

(d) **Effect of a permit.**

(1) The issuance of a permit does not (A) convey any property rights of any sort, or any exclusive privilege, (B) authorize any injury to persons or property or invasion of other private rights, (C) authorize any infringement of the Connecticut General Statutes, Regulations of Connecticut State Agencies or municipal ordinances, or (D) affect the responsibility of the permittee to obtain all applicable federal, State and municipal authorizations or permits for the discharge and activities which generate the discharge.

(2) The permittee is authorized to discharge (A) pollutants in quantities and concentrations as specified in the permit; and (B) those listed substances resulting from the processes or activities described in the permit application which are specified in said application, and any other substances or materials from such processes or activities, in quantities and concentrations which the commissioner determines cannot reasonably be expected to cause pollution and will not adversely affect the operation of any POTWs. Discharge of a listed substance in excess of the level specified in an application, or discharge of any substance which is not listed on the permit or in Appendix B or D of section 22a-430-4 of the Regulations of Connecticut State Agencies but results from processes or activities described in the permit application, shall not be deemed to be a permit violation or result in a forfeiture pursuant to section 22a-438 (a) of the Connecticut General Statutes if such newly determined substance or increase resulted from a process or activity described in the permit application. However, the commissioner may seek an injunction or issue an order, and may seek criminal penalties against a permittee who willfully or with criminal negligence causes or threatens pollution.

(3) Discharge of a listed substance in excess of the level specified in an application, or discharge of any substance which is not listed on the permit or permit application shall constitute a permit violation if such newly determined substance or increase resulted from a process or activity not described in the permit application.

(4) (A) The issuance of a permit is not an irreversible authorization to discharge. In accordance with sections 22a-6, 22a-7 or 22a-416 through 22a-471 of the Connecticut General Statutes, as amended, the commissioner may issue an order requiring a permittee to reduce or eliminate the discharge of any pollutant, listed substance or other substance for the following reasons: (1) to require a permittee to meet the requirements of this section and section 22a-430-4 of the Regulations of Connecticut State Agencies; (2) a determination that the discharge of a pollutant, listed substance or other substance individually or in combination with other permitted discharges is causing or may cause pollution of the waters of the State, provided that the commissioner briefly justifies such determination to the permittee in writing (3) a determination that the discharge contains substances which were not described in the permittee's application, (4) in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions to bring a permittee into compliance with chapter 446k of the Connecticut General Statutes and regulations adopted thereunder and to ensure that the commissioner's actions are consistent with the CWA and regulations adopted thereunder. If such an order is issued to establish effluent limitations required by the CWA, it shall be issued in conjunction with a permit modification under subsection (p) of Section 22a-430-4 of the Regulations of Connecticut State Agencies. The commissioner may also issue an order requiring a permittee to investigate any condition relating to the permittee's activities which the commissioner determines may have the potential for causing pollution, or may be useful in the evaluation of a permit application.

(B) If he or she has not done so already for CWA requirements, the commissioner shall promptly modify the permit to incorporate any necessary limitations or conditions required by such order, in accordance with section 22a-430 (e) of the Connecticut General Statutes. Such modifications shall follow the applicable procedures in subsection (p) of section 22a-430-4 of the Regulations of Connecticut State Agencies.

(e) **Duty to comply.**

(1) The permittee shall comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of Chapter 446k of the Connecticut General Statutes. Permit noncompliance is grounds for enforcement action, permit revocation or modification, or denial of a permit renewal application. Violations caused by bypasses allowed under subsection (k) of this section and/or exceedances allowed under subsection (m) of this section shall not be considered permit noncompliance.

(2) The permittee shall comply with effluent limitations, standards or prohibitions established under section 307 (a) CWA which are adopted in subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies for toxic substances upon adoption, even if the permit has not yet been modified to incorporate the requirement.

(3) Except for any toxic effluent standards and prohibitions imposed under section 307 CWA, compliance with a permit during its term shall constitute compliance, for purposes of enforcement, with sections 301, 302, 306, 307, 318, 403 and 405 of the Clean Water Act. The commissioner may modify or revoke a permit during its term for cause as provided in subsection (p) of section 22a-430-4 of the Regulations of Connecticut State Agencies.

(4) It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

(f) **Proper operation and maintenance.**

(1) The permittee shall at all times properly operate and maintain all facilities and systems and parts thereof for wastewater collection, storage, treatment and control which are installed or used by the permittee to achieve compliance with the terms and conditions of the permit. Proper operation and maintenance includes but is not limited to effective performance, adequate funding, and adequate operator staffing and training, including the employment of certified operators as may be required by the commissioner pursuant to sections 22a-416-1 through 22a-416-10 of the Regulations of Connecticut State Agencies, as amended, and adequate laboratory and process controls, including appropriate quality assurance procedures. The commissioner shall, as a condition of a permit or by issuance of an order in accordance with sections 22a-416 through 22a-471 of the Connecticut General Statutes as amended, require the installation and operation of back-up or auxiliary facilities or similar systems or the inventory of spare parts and appurtenances only if he or she determines that such is necessary to achieve compliance with applicable requirements based upon consideration of all factors which he or she deems relevant, including but not limited to:

(A) the proposed alternatives to such facilities, systems or inventories;

(B) the ability of the permittee's staff to properly carry out such alternatives; and

(C) the permittee's record of compliance with applicable requirements.

In determining which facilities, systems or inventories are to be required for achieving compliance with applicable requirements, the commissioner shall consider the comparative economic feasibility of the proposed alternatives.

(2) The commissioner may require any applicant or permittee as part of the detailed design of any treatment facilities and/or spill prevention and control systems required by subsection (p) of this section to develop an operation and maintenance manual which shall fully describe the operation and maintenance of the systems, including but not limited to the following aspects:

(1) A plan for operational monitoring and inspection

(2) Instrument calibration frequency

(3) Inventory of necessary chemicals, equipment and spare parts

(4) A plan for preventive maintenance

(5) Operating instructions

(6) Housekeeping

(7) Security measures

(g) **Sludge disposal.** The permittee shall dispose of screenings, sludges, chemicals and oils and any solid or liquid wastes resulting from the wastewater treatment processes at locations approved by the commissioner for disposal of such materials, or by means of a waste hauler licensed under the provisions of the Connecticut General Statutes.

(h) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit or any discharge which has a reasonable likelihood of adversely affecting human health or the environment.

(i) **Facility modifications; notification**

(1) All facility expansions or alterations, production increases, or process modifications shall comply with the requirements of subsections (o) and (p) of this section.

(2) If any facility expansion or alteration, production increase or process modification may result in the discharge of any new water, substance or material or increase the quantity or concentration of an existing pollutant beyond permit conditions, or may constitute a new source, the permittee shall notify the commissioner. No such activity shall be undertaken until either (i) the commissioner notifies the permittee in writing that a permit modification is unnecessary or (ii) if in the commissioner's judgment the activity would result in any such discharge beyond permit conditions, the permittee obtains a modification of his or her permit in accordance with subsection (p) of section 22a-430-4 of the Regulations of Connecticut State Agencies.

(3) No permittee shall expand or significantly alter any wastewater collection or treatment facility or its method of operation without the prior written approval of the commissioner, unless such change is necessary to correct a permit violation or avoid an imminent permit violation. Any permittee which makes any significant change to a collection or treatment facility or its method of operation for the purpose of correcting or avoiding a permit violation shall, in addition to any other notifications required by this subsection, notify the director within two hours of making the change or at the start of the next business day if the change is made outside normal business hours and shall, within thirty days thereafter, submit a written report for the review and approval of the director fully describing the changes made and the reasons therefor.

(4) Notification of facility modifications does not stay any permit term or condition.

(5) The commissioner shall respond to all notifications of facility modifications under paragraph (2) above within sixty (60) days of receipt of the notification and shall indicate whether a permit modification is necessary or that additional information is required.

(j) **Monitoring, records and reporting requirements**

(1) All permittees shall monitor their discharges by such means as the commissioner determines are appropriate to assure compliance with permit limitations, standards and conditions, including but not limited to the use of chemical analyses, visual observations, measurements of any kind, including flow, and submission of periodic engineering or other reports, plans or other documentation of compliance. The commissioner may also require a permittee to similarly monitor any other locations in order to demonstrate the effects of the permitted discharges or activities, and may require a permittee to inspect any system installed for the collection, treatment, storage or disposal of wastewater or to install monitoring facilities at specified locations. Any such monitoring and inspection requirements may be included as permit conditions.

(2) Except as provided in this subsection and subsection (k) of this section, the minimum frequency of monitoring by a permittee holding a permit issued or renewed after the effective date of this section, to determine compliance with effuent limitations in the permit, shall be as specified in the Monitoring Schedule appended to and hereby made a part of this section for the discharge category as determined by the commissioner. The commissioner may require additional monitoring for reasons including but not limited to: (A) if a wasteload allocation for the receiving waters has been established in the Connecticut Water Quality Standards; (B) if the discharge is a significant source of wastes or flow to the receiving waters or to a POTW; (C) any prior violation by the permittee of any statute or regulation administered by the commissioner, or any order or permit issued by the commissioner, (D) if, for a new or modified permit, such increased frequency is necessary in order to initially

verify compliance with any permit terms or conditions, or (E) if necessary to insure proper operational control of the treatment facilities.

(3) Except as provided in this subsection and subsection (K) of this Section, the minimum frequency of toxicity monitoring by a permittee to determine compliance with an acute or chronic toxicity limit in the permit shall be quarterly. The commissioner may require additional acute or chronic toxicity monitoring for reasons including, but not limited to those specified in subdivision (2) of this subsection.

(4) Notwithstanding the provisions of subdivision (3) of this subsection, the commissioner may reduce the frequency of acute or chronic toxicity monitoring provided: (A) the permittee has demonstrated that the toxicity of the discharge is relatively constant and the potential for the discharge to cause acute or chronic toxicity in the receiving waters is minimal, or (B) the permittee demonstrates that compliance with physical or chemical effluent limitations will adequately protect the waters of the state from pollution.

(5) For any discharge category which is not listed in the appended Monitoring Schedule, the commissioner shall establish a frequency of monitoring which he or she determines will adequately insure that the permittee in question is in compliance with applicable statutes, regulations and permit terms and conditions. For NPDES permits only, each outfall shall be monitored at least annually for each pollutant, with the following exceptions:

(A) For general permits; or

(B) In the case of total toxic organics if the commissioner has approved a solvent management plan for the permittee.

(6) If the permittee monitors any discharge more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or specified in the permit, the results shall be included in the calculation and reporting of the data in the monitoring report.

(7) The permittee or applicant shall ensure that samples and measurements taken for the purposes of monitoring compliance with permit terms and conditions or submitting a permit application are representative of monitored activity. All sampling shall be daily composite sampling unless otherwise specified in the permit. Sample collection, preservation, handling and analytical techniques used to determine compliance with effluent limitations in the permit or to submit a permit application shall be as prescribed by 40 CFR Part 136, with the following exceptions:

(A) Sample collection, handling, and analytical techniques used to determine the acute toxicity of the discharge shall be as prescribed in ''Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms'' (EPA/600/4-85/013) unless otherwise specified in writing by the commissioner or in the Regulations of Connecticut State Agencies;

(i) Acute toxicity shall be assumed to occur at any discharge concentration which exceeds the LC50 concentration determined in an acute toxicity test multiplied by an application factor of 0.33, unless a specified NOAEL concentration has been established as a permit limitation or condition in which case the following modifications to the determination of acute toxicity shall apply:

(a) A minimum of five (5) replicate test chambers at a discharge concentration equal to the specified NOAEL concentration shall be employed in the test.

(b) A minimum of three (3) replicate control test chambers containing dilution water only shall be employed in the test.

(c) Acute toxicity shall be assumed to occur at any discharge concentration greater than the specified NOAEL concentration provided the mean survival of

test organisms in the replicate test chambers employed at the specified NOAEL concentration is less than ninety (90) percent;

(d) Any test in which the survival of test organisms is less than ninety (90) percent in each replicate control test chamber shall be considered an invalid test.

(ii) The results of an acute toxicity test conducted on a grab sample may be used to determine compliance with effluent limitations or permit conditions for acute toxicity.

(iii) Test species to be used to determine the toxicity of a discharge shall be determined according to the following:

(a) For discharges to fresh receiving waters exhibiting a normal salinity of one (1) part per thousand or less, Pimephales promelas and Daphnia pulex shall be used;

(b) For discharges to estuarine waters exhibiting a normal salinity of between one (1) part per thousand and twenty (20) parts per thousand, species selection shall be determined by the commissioner on a case by case basis;

(c) For discharges or marine waters exhibiting a normal salinity greater than twenty (20) parts per thousand Cyprinodon varigatus and Mysidopsis bahia shall be used;

(B) Sample collection, handling, and analytical techniques used to determine the chronic toxicity of the discharge, including the use of chronic and short-term chronic toxicity testing methods, shall be determined by the commissioner on a case by case basis unless otherwise specified in the permit or the Regulations of Connecticut State Agencies;

(i) The concentration of a discharge at which chronic toxicity occurs shall be assumed equal to the LC50 value determined in an acute toxicity test multiplied by an application factor of 0.05 or, the NOAEL concentration determined in an acute toxicity test multiplied by an application factor or 0.15. These application factors shall apply unless the applicant demonstrates to the satisfaction of the commissioner that the application factor is inappropriate due to the unique physical, biological or chemical characteristics of the discharge or receiving water including but not limited to consideration of one or more of the following:

(a) The results of concurrent acute and chronic or short-term chronic toxicity tests conducted on a minimum of three (3) representative samples of the discharge.

(b) The results of chronic or short-term chronic toxicity tests conducted on a minimum of three representative samples of the discharge using receiving water and synthetic fresh, salt, or estuarine water in concurrent tests;

(c) Data on the hydraulic characteristics of the discharge and receiving waters;

(d) Any other information the commissioner deems relevant.

(ii) All sampling for determination of chronic toxicity shall be daily composite sampling unless otherwise specified in the permit or the Regulations of Connecticut State Agencies except that the results of toxicity tests conducted on a grab sample of the discharge multiplied by an application factor of three (3) shall be considered to be equal to the results obtained for a daily composite sample of the discharge.

(8) The permittee shall install and maintain all required monitoring equipment which will be used to comply with the monitoring requirements of this subsection and the permit in accordance with manufacturer's recommendations and specifications, and shall promptly repair all such equipment which fails or malfunctions. In the event of any such failure or malfunction or at the start of the next business day if such failure or malfunction occurs outside normal business hours, the permittee shall notify the director within two hours of such failure or malfunction or at the start of the next business day if such failure or malfunction occurs outside normal

business hours, and employ such other equipment or methods as the director determines are necessary to satisfy the permit terms and conditions, and shall submit a written report to the director within five days of the failure or malfunction which shall include the information specified in subdivision (4) of subsection (k) of this section.

(9) (A) Records of monitoring information shall include the following:

(1) The mass or other measurement specified in the permit for each pollutant or substance;

(2) Total flow for each discharge for each day of discharge and other flow measurements specified in the permit for each discharge;

(3) The date, exact place, and time of sampling or measurements;

(4) The individuals who performed the sampling or measurements;

(5) The dates analyses were performed;

(6) The individuals who performed the analyses;

(7) The analytical techniques or methods used;

(8) The results of such analyses;

(9) Frequency and duration for non-continuous discharges;

(10) Production information, where effluent limitations are production based, or as may otherwise be required by the commissioner;

(11) All calibration and maintenance records and original strip chart recordings for continuous monitoring, recording or controlling instrumentation related to the wastewater treatment system; and

(12) Any other information specified in the permit.

The commissioner may require the permittee to submit some or all of this information at any time or as part of a regular schedule of reporting.

(B) The permittee shall retain copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least five (5) years from the date of the report or application. The commissioner may extend this period as he or she deems necessary upon written notice to the permittee stating the reasons for such extension, and this period is automatically extended for as long as a permittee is under an active order from the commissioner under Chapter 446K of the Connecticut General Statutes or if the permittee is in litigation for any violation of any permit or order issued by the commissioner under Chapter 446K of the Connecticut General Statutes.

(C) If the permittee becomes aware that any information submitted in compliance with a permit was erroneous, or that required or necessary information was omitted, he or she shall notify the commissioner within seventy two hours and submit the correct information in writing within thirty days.

(10) (A) All NPDES permittees required to submit a discharge toxicity evaluation pursuant to subdivision (c) (21) of Section 22a-430-4 of the Regulations of Connecticut State Agencies shall submit said evaluation for the review and approval of the commissioner no later than December 31, 1988.

(B) All NPDES permittees which are required to submit the evaluation in accordance with subparagraph (A) above shall, on or before ninety days after submission of such evaluation, but in no case later than March 31, 1989, and on a quarterly basis thereafter unless an alternative schedule has been specified by the commissioner pursuant to subdivisions (3) or (4) of this subsection, submit to the commissioner the results of toxicity tests performed in accordance with subdivision (7) of this subsection.

(C) If any test results submitted in accordance with subparagraph (B) above indicate that an acute or chronic limitation established in accordance with subdivision

(*l*) (5) of Section 22a-430-4 of the Regulations of Connecticut State Agencies has been exceeded, whether or not such limitation has been incorporated into the permittee's permit, the permittee shall, within thirty days of such test, submit (i) the results of another such test or (ii) a report for the review and approval of the commissioner describing proposed steps to eliminate toxic impacts of the discharge on the receiving water and a proposed schedule for their implementation. Such a report shall be submitted in all cases within thirty days of the second of any two consecutive tests, or within thirty days of the third test in any one year period, which exceeds an acute or chronic toxicity limitation.

(D) All POTWS shall, no later than December 31, 1988 and on a quarterly basis thereafter, submit to the commissioner the results of two acute toxicity tests performed on an undiluted daily composite sample of the discharge, and the results of a daily composite sample for the substances listed in Table III of Appendix B of Section 22a-430-4 of the Regulations of Connecticut State Agencies. If any such toxicity test shows toxic impacts, a second test shall be performed and the results submitted to the commissioner within sixty days of the first test. The POTW shall submit a discharge toxicity evaluation as described in subdivision (c) (21) of Section 22a-430-4 of the Regulations of Connecticut State Agencies within thirty days of the second of any two consecutive tests which show toxic impacts, or within thirty days of the third test within any one year period which show toxic impacts.

(11) (A) All monitoring reports shall be submitted to the director in accordance with this subsection and the terms and conditions of the permit, and, for discharges to POTWs, shall be simultaneously submitted to the person designated by the municipality as responsible for overseeing the operation of the POTW.

(B) Such reports shall be submitted on forms provided or approved by the commissioner. Failure to use forms as required by the commissioner shall be considered an act of noncompliance. If no discharge occurs for the entire period in which a permittee is required to monitor, the permittee shall note on the monitoring report that no discharge occurred for that entire period.

(C) All reports and information required by a permit to be submitted to the commissioner or director shall be due on the date specified in the permit. If a schedule of compliance is included in a permit either directly, or indirectly by reference to a separate abatement order, the permittee shall notify the commissioner in writing when compliance with each step is achieved. Failure to submit any report or information to the commissioner by the required date, or the submission of information which the permittee knows, has reason to believe or can reasonably ascertain is incomplete, improperly completed or incorrect, is considered an act of noncompliance with a permit.

(D) The permittee shall, within two hours of becoming aware of the circumstances, and at the start of the next business day if he or she becomes aware of the circumstances outside normal business hours, notify the director and, for discharges to POTWs, the responsible person under subparagraph (8) (A) of this subsection of any actual or anticipated noncompliance with permit terms or conditions if (i) the noncompliance is greater than two times the permitted level except for violations of any maximum daily limitation in an NPDES permit, in which case all violations shall be reported or (ii) the condition may endanger human health, the environment or the operation of a POTW, including sludge handling and disposal, and shall submit a written report to the director within five days thereafter. Such report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been

corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. Notification of actual or anticipated noncompliance does not stay any permit term or condition.

(E) The permittee shall notify the director within seventy-two hours and in writing within thirty days when he or she knows or has reason to believe that the concentration in the discharge of any listed substance or any toxic substance as listed in appendix B or D of this section has exceeded or will exceed the highest of the following levels:

(i) One hundred micrograms per liter;

(ii) Two hundred micrograms per liter for acrolein and acrylonitrile, five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony;

(iii) An alternative level specified by the commissioner, provided such level shall not exceed the level which can be achieved by the permittee's treatment system.

(iv) A level two times the level specified in the permit application.

(F) Within ninety days following adoption of a limitation for a discharge to a POTW in subsection (*l*) of section 22a-430-4 of the Regulations of Connecticut State Agencies by incorporation by reference to the CWA or the CFR, the permittee shall submit a report to the director containing the following information:

(i) the nature and concentration of all substances in the discharge for which new limitations have been so adopted; and

(ii) an indication of whether the new limitations are being met on a consistent basis and, if not, the additional facilities or procedures needed to meet the new limitations.

(12) For NPDES permits to POTWS, the commissioner may require the POTW to monitor the influent to, discharge from and sludge generated by, the POTW for any substances listed in Appendix B of Section 22a-430-4 of the Regulations of Connecticut State Agencies.

(k) **Bypass.**

(1) The permittee shall not at any time bypass the collection system or treatment facilities or any part thereof unless (A) (i) such bypass is unanticipated, unavoidable, and necessary to prevent loss of life, personal injury or severe property damage, and (ii) there were no feasible alternatives to the bypass, including but not limited to the use of auxiliary or back-up treatment facilities, retention of untreated wastes, stopping the discharges, or maintenance during normal periods of equipment downtime; or (B) the permittee receives prior written approval of the bypass from the commissioner in order to perform essential maintenance, and the bypass does not cause effluent limitations to be exceeded. The commissioner may impose any conditions on such an approval which he or she deems necessary to protect the waters of the state, including but not limited to requirements for special monitoring or reductions in the release of pollutants and water to the treatment system. Condition (A) (ii) is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate backup equipment to prevent a bypass.

(2) In the event such a bypass is necessary, the permittee shall to the extent possible minimize or halt production and/or all discharges until the facility is restored or an alternative method of treatment is provided.

(3) In order to prevent a bypass, the permittee may schedule maintenance during periods when no discharge is occurring or employ any necessary means, including but not limited to duplicate units and systems or alternative collection and treatment or pretreatment schemes. Any such means shall (A) insure that the effluent limitations specified in the permit are achieved; (B) be approved by the director in writing prior to its use, which approval shall include an alternative schedule for monitoring

if appropriate; and (C) be discontinued upon completion of the performance of the essential maintenance. The permittee shall provide notice to the director not less than twenty-four (24) hours prior to the use of any alternative scheme and monitor and record the quality and quantity of the discharge in accordance with permit terms and conditions or an approved alternative schedule. Such monitoring shall be submitted with the next monitoring report required by the permit, and shall not be used to meet routine scheduled monitoring report requirements of the permit.

(4) If any bypass occurs or may occur, the permittee shall, within two hours of becoming aware of such condition or need, notify the director during normal business hours (566-3245), and the department's Emergency Response Unit at all other times (566-3338) and submit within five days a written report including the cause of the problem, duration including dates and times and corrective action taken or planned to prevent other such occurrences. In addition, if the permittee has reason to believe that any effluent limitation specified in the permit may be violated, the permittee shall immediately take steps to prevent or correct such violation, including but not limited to employing an alternative scheme of collection or treatment, and/or control the production of the wastewater and shall monitor and record the quality and quantity of the discharge in accordance with the permit terms and conditions or an approved alternative schedule. Such monitoring shall be submitted with the next monitoring report required by the permit, and shall not be used to meet the routine monitoring requirements of the permit.

(*l*) **Conditions applicable to POTWs**

(1) No municipality shall allow a new discharge to its POTW of any process wastewaters or any cooling waters without verification from the commissioner that a permit has been issued pursuant to section 22a-430 of the Connecticut General Statutes.

(2) The municipality shall provide notice to the director of (A) any known discharge of pollutants to its POTW in excess of those quantities or concentrations permitted by the commissioner, (B) any known discharge of wastes to its POTW in excess of those quantities or concentrations which existed prior to the issuance of the POTW's permit, or (C) any known new discharges of the types specified in subdivision (1) of this subsection which have been initiated without a permit from the commissioner. Such notice shall include information on the quality and quantity of effluent entering the POTW and any anticipated impact of the discharge on the quantity or quality of effluent to be discharged from the POTW.

(3) The permittee shall adopt a sewer use ordinance approved by the commissioner to protect the physical and operational integrity of the collection and treatment facilities. The commissioner may, as he or she deems necessary, require the permittee to modify the sewer use ordinance.

(4) The permittee shall maintain a system of user charges or dedicated taxes sufficient to cover the cost of operation and maintenance, and replacement as appropriate, of the collection system and treatment facilities in order to insure compliance with all permit conditions.

(5) The commissioner may require the permittee to develop a plan for responding to emergency conditions which threaten or may threaten the operation, performance or physical integrity of the collection and/or treatment facilities. Such plan shall include, but not necessarily be limited to (A) a map showing the locations and types of all process wastewater discharges permitted by the commissioner and key points in the collection system at which samples may be taken in order to locate the source or cause of the emergency condition, and (B) planned actions to be taken in the event that an emergency condition occurs.

(m) **Effluent limitation violations.**

(1) For the purposes of determining compliance with any permit, each exceedance of a specific effluent limitation shall be considered a separate permit violation unless such exceedance was (A) temporary; (B) of an effluent limitation not established pursuant to subparagraph (*l*) (4) (A) (x), and, for existing permits, not established in order to achieve consistency with water quality standards; and (C) caused by: riots, wars, sabotage or other acts of violence beyond the reasonable control of the permittee; floods, hurricanes or other natural disasters; or any other equally severe, unforeseeable and uncorrectable accidents; where such acts or events were occasioned directly upon the permittee or a person under contract to the permittee. Such acts or events shall not include operational error, improperly designed or inadequate treatment facilities, lack of preventive maintenance, carelessness, improper operation or loss of the primary power supply.

(2) In any enforcement action for an exceedance of an effluent limitation, the burden of proof is on the permittee to show, through properly signed, contemporaneous operating logs or other relevant evidence, that:

(A) One or more of the above factors caused the exceedance;

(B) The permittee provided notice of the exceedance as required by subparagraph (11) (D) of subsection (j) of this section; and

(C) The permittee complied with subsections (h) (duty to mitigate) and (f) (operation and maintenance) of this section.

(3) In determining if any effluent limitation has been exceeded, the commissioner shall, on the request of a permittee, and may, on his or her own initiative, consider the accuracy of the sampling, monitoring, and analytical procedures employed, as determined by reference to (A) 40 CFR 136, or (B) for effluent limitations on acute and chronic toxicity by reference to ''Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms'' (EPA/600/4-85-013) or alternate method if such method has been specified in writing by the commissioner, or any other information which he or she deems relevant, including but not limited to reference toxicant test results.

(n) **Enforcement.** The commissioner may take any enforcement action provided by law, including but not limited to seeking injunctions, penalties and forfeitures as provided in sections 22a-6, 22a-7, 22a-430, 22a-432, 22a-435, 22a-438 and 22a-471 of the Connecticut General Statutes as amended, for any violations or acts of noncompliance with chapter 446k of the General Statutes or any regulation, order, permit or approval issued thereunder.

(o) **Resource conservation.**

(1) All permittees shall implement and maintain practices and/or facilities which, to the maximum extent practicable, result in the minimum amount of wastewater discharged. Such results may be achieved by methods including but not limited to water conservation, resource recovery, waste recycling, wastewater reuse, and material or product substitution.

(2) Excessive use of water or the addition of water to dilute an effluent in order to meet any permit limitations or conditions is prohibited.

(p) **Spill prevention and control.**

(1) All permittees shall maintain practices, procedures and facilities designed to prevent, minimize and control spills, leaks or such other unplanned releases of all toxic or hazardous substances and any other substances as the commissioner deems necessary to prevent pollution of the waters of the state. Such requirements shall, unless otherwise allowed by the commissioner, apply to all facilities used for storing,

handling transferring, loading or unloading such substances, including manufacturing areas.

(2) The requirements of this subsection do not apply to facility components or systems already covered by plans prepared or approved under the Resource Conservation and Recovery Act and the Spill Prevention, Control and Countermeasure program.

(q) **Instrumentation, alarms, flow recorders**

(1) Except for batch treatment systems unless required by the commissioner, process wastewater treatment systems shall include instrumentation to automatically and continuously indicate, record and/or control those functions of the system and characteristics of the discharge which the commissioner deems necessary to assure protection of the waters of the state.

(2) Audible and visual alarms shall be included with all instrumentation installed to comply with subparagraph (1) of this subsection, and for such other functions as the commissioner determines are necessary to assure proper operation of the system. Any condition which causes an alarm shall be corrected immediately, or the discharge shall be stopped until the correction is made.

(3) All treatment facilities, except batch facilities and those discharging to the ground waters unless required by the commissioner, shall include facilities or instrumentation to allow accurate measurement and recording of the volume of wastewater discharged per day and at any time (instantaneous), including through the use of automatic instrumentation if deemed appropriate by the commissioner.

(r) **Equalization.** All treatment facilities shall be designed to prevent upsets, malfunctions or instances of noncompliance resulting from variations in wastewater strength or flow rate, and shall include, as the commissioner deems necessary, equalization facilities separate from the treatment facilities.

MONITORING SCHEDULE

I. Category I

Subcategory	*Minimum Frequency of Monitoring*
X	*Monthly*
Y	*Twice Per Month*
Z	*Weekly*

Wastewater Category	*Subcategory*		
Wastewater Category	*X**	*Y**	*Z**
Adhesives and Sealants[2]	—	0–5,000	>5,000
Aluminum Forming[1]	—	0–5,000	>5,000
Asbestos Manufacturing[1]	—	0–5,000	>5,000
Bakery and Confectionary[3]	<5,000	5,000–50,000	>50,000
Battery Manufacturing[1]	—	0–5,000	>5,000
Beverage[3]	<5,000	5,000–50,000	>50,000
Builders Paper and Roofing Felt[1]		0–5,000	>5,000
Canned and Preserved Fruits Processing[1]	<5,000	5,000–50,000	>50,000
Canned and Preserved Seafood Processing[1]	<5,000	5,000–50,000	>50,000
Cement Manufacturing[1]	—	0–50,000	>50,000
Clay, Gypsum, Refractory, & Ceramic Products[3]	—	0–50,000	>50,000
Coal Gasification[3]	—	0–50,000	>50,000
Coal Liquefaction[3]	—	0–50,000	>50,000
Coal Mining[1]	—	0–50,000	>50,000

Wastewater Category	*Subcategory*		
Wastewater Category	*X**	*Y**	*Z**
Coil Coating[1]	—	0–5,000	>5,000
Concrete Product[3]	<10,000	10,000–50,000	>50,000
Copper Forming[1]	—	0–5,000	>5,000
Dairy Products Processing[1]	<5,000	5,000–50,000	>50,000
Edible Oils[3]	<5,000	5,000–50,000	>50,000
Electrical and Electronic Components[1]	—	0–5,000	>5,000
Electroplating	<5,000	5,000–10,000	>10,000
Explosives Manufacturing[3]	—	0–5,000	>5,000
Ferroalloys Manufacturing[1]	—	0–5,000	>5,000
Fertilizer Manufacturing[1]	—	0–5,000	>5,000
Fish Hatchery & Farm[3]	—	0–1,000,000	>1,000,000
Foundries	—	0–5,000	>5,000
Furniture Manufacturing[3]	—	0–5,000	>5,000
Glass Manufacturing[1]	—	0–50,000	>50,000
Grain Mills[1]	—	0–50,000	>50,000
Gum and Wood Chemical[3]	—	0–5,000	>5,000
Hospitals[1]	<5,000	5,000–100,000	>100,000
Inorganic Chemicals Manufacturing[1]	—	0–5,000	>5,000
Iron and Steel Manufacturing[1]	—	0–50,000	>50,000
Laboratory Wastewaters[1]	<5,000	5,000–100,000	>100,000
Leather Tanning and Finishing[1]	—	0–50,000	>50,000
Meat Products and Rendering[1]	<5,000	5,000–50,000	>50,000
Mechanical Products	—	0–5,000	>5,000
Metal Finishing[1]	<5,000	5,000–10,000	>10,000
Metal Molding & Castings[1]	—	0–50,000	>50,000
Mineral Mining and Processing[1]	—	0–50,000	>50,000
Miscellaneous Food Product[3]	<5,000	5,000–50,000	>50,000
Nonferous Metals Manufacturing[1]	—	0–5,000	>5,000
Oil and Gas Extraction[1]	—	0–50,000	>50,000
Ore Mining[1]	<100,000	100,000–1,000,000	>1,000,000
Organic Chemicals Manufacturing[1]	<5,000	5,000–50,000	>50,000
Paint and Ink Formulation[3]	—	0–1,000	>1,000
Paving and Roofing Materials[1]	—	0–5,000	>5,000
Pesticides[1]	—	0–1,000	>1,000
Petroleum Refining[1]	—	0–5,000	>5,000
Pharmaceutical Preparations[1]	—	0–50,000	>50,000
Phosphate Manufacturing[1]	—	0–50,000	>50,000
Photographic Equipment, Supplies[3]	<5,000	5,000–50,000	>50,000
Photographic Processing[3]	<5,000	5,000–50,000	>50,000
Plastics and Synthetic Material Mfg.	<5,000	5,000–50,000	>50,000
Plastics Processing[1]	—	0–5,000	>5,000
Porcelain Enameling[1]	—	0–5,000	>5,000
Printing and Publishing[3]	—	0–5,000	>5,000
Pulp and Paper Mills[1]	—	0–50,000	>50,000
Rubber Processing[3]	<5,000	5,000–50,000	>50,000
Shale Oil[3]	—	0–50,000	>50,000
Shipbuilding[3]	—	0–50,000	>50,000
Shore Receptor and Bulk Terminal[3]	—	0–50,000	>50,000
Soap, Detergent, and Cosmetic Manufacturing[3]	—	0–5,000	>5,000
Steam Electric Power Plants[1]	—	0–5,000	>5,000
Sugar Processing[1]	—	0–50,000	>50,000
Textile Mills[1]	—	0–50,000	>50,000
Timber Products Processing[1]	—	0–5,000	>5,000
Transportation[3]	—	0–50,000	>50,000

II. Category II Miscellaneous Discharges

Wastewater Category	*Minimum Frequency of Effluent Monitoring*
1. Non-Contact Cooling Water	
a. Minor	None
b. Other	Quarterly
2. Incinerator[3]	Twice per Month
3. Transfer Station[3]	Monthly
4. Hazardous Waste Disposal Areas[3]	
a. <10 acres (on-site)	Monthly
b. 10 to 30 acres (on-site)	Monthly
c. >30 acres (on-site)	Monthly
5. Solid Waste Disposal Areas[3]	
a. <10 acres (on-site)	Quarterly
b. 10 to 20 acres (on-site)	Quarterly
c. >20 acres (on-site)	Quarterly
6. Water Production Wastewaters[3]	Monthly
7. Agricultural Activities[3]	Monthly
8. Stormwater	None
9. Groundwater Contamination Recovery Systems[3]	Monthly
10. Hazardous Waste Facility[3]	Weekly
11. Sanitary Sewage[3] to Surface Water	
a. <100,000*	Monthly
b. 100,000–1,000,000*	Weekly
c. 1,000,000–2,000,000*	Twice per week
d. >2,000,000*	Three times per week
12. Sanitary Sewage[3] to ground waters	
a. 0–5,000*	Annually
b. >5,000*	Monthly
13. Sanitary Sewage[3] to Sewer requiring public notice under Section 22a-430-2 of the Regulations of Connecticut State Agencies, as amended.	None
14. Sanitary sewage[3] to sewer not requiring public notice under Section 22a-430-2 of the Regulations of Connecticut State Agencies, as amended.	None
15. Dredging[3]	Monthly
16. Auto and other Laundries Wastewaters	
a. Power Laundries, Family & Commercial[2]	
1. 0–<50,000*	Quarterly
2. >50,000*	Monthly
b. Linen Supply[2]	
1. 0–<50,000*	Quarterly
2. >50,000*	Monthly
c. Diaper Service[2]	Monthly
d. Coin-Operated Laundries & Dry Cleaners[2]	Quarterly
e. Dry Cleaning Plants Except Rug Cleaning[2]	Quarterly
f. Carpet and Upholstery Cleaners[2]	Monthly
g. Industrial Laundries[2]	
1. 0–<50,000*	Quarterly
2. >50,000*	Monthly
h. Misc. Laundry and Garment Services[2]	Quarterly
i. Car Washes[2]	Quarterly
17. Septage Disposal Area[3]	Quarterly
18. Blowdown from Heating and Cooling Equipment[3]	
a. 0–5,000*	None
b. >5,000*	Quarterly
19. Tumbling and Cleaning of Parts Wastewaters[3]	
a. 0–<5,000*	Quarterly
b. >5,000*	Monthly

Wastewater Category	*Minimum Frequency of Effluent Monitoring*
20. Building floor drain wastewaters[3]	None
21. Swimming pool backwash[3]	None
22. Dewatering Wastewaters	None
23. Minor Heat Pump Wastewaters	None
24. Other Heat Pump Wastewaters	Quarterly
25. Potable Water System Flushing Wastewaters	None
26. Hydrostatic Pressure Testing Wastewaters	None
27. All Other Categories of General Permits	None

* These figures refer to average daily flow in gallons per day.

[1] Means wastewaters from this source, as defined pursuant to section 301 of the 1972 federal Water Pollution Control Act 33 U.S.C. 1251 et seq.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget.

[3] Defined in section 22a-430-6 (b) of the Regulations of Connecticut State Agencies.

> means more than

< means less than

(Effective May 31, 1988)

Sec. 22a-430-4. Procedures and criteria for issuing water discharge permits

(a) **Duty to apply**

(1) Any person who or municipality which is required by section 22a-430 of the Connecticut General Statutes to obtain a permit to discharge to the waters of the state, including any person who or municipality which increases an existing discharge beyond permit conditions, shall do so in accordance with the provisions of this section and section 22a-430-3 of the Regulations of Connecticut State Agencies, as amended.

(2) Concentrated animal feeding operations, concentrated aquatic animal production facilities, aquaculture projects, and silvicultural activities, as defined in 40 CFR 122.23, 40 CFR 122.24, 40 CFR 122.25, 40 CFR 125 Subpart B, and 40 CFR 122.27 respectively and after any case-by-case review as specified therein, shall be subject to the requirements of this section and section 22a-430-3 of the Regulations of Connecticut State Agencies, as amended.

(3) When a facility or activity is owned by one person or municipality but is leased or in some other way the legal responsibility of another person or municipality (the operator) it is the operator's responsibility to submit any applications required under this section.

(b) **Duty to reapply.** Each permit shall be effective for a fixed term not to exceed five years. Any permittee who wishes to continue an activity authorized by a permit after the expiration date of the permit must apply for and obtain a renewed permit. Notwithstanding the provisions of section 22a-3a-1 of the Regulations of Connecticut State Agencies, an application for a permit renewal shall be submitted at least one hundred and eighty (180) days prior to the expiration date of the existing permit, in accordance with this section and section 22a-430-3 of the Regulations of Connecticut State Agencies.

(c) **Application Requirements.** Except for general permits, application for a new permit or renewal of a permit shall be made on forms provided or approved by the commissioner and shall include all applicable information referred to in this subsection. Application for a new or renewed general permit, as specified in subdivision (b) (6) of section 22a-430-3 of the Regulations of Connecticut State Agencies, shall be made on forms provided or approved by the commissioner and shall include only the information specified in subdivisions (1), (2), (3), (13) and

(25) of this subsection. Where the name of a specific substance is required and the disclosure of that substance would reveal information relating to secret processes or methods of manufacture or production, the applicant may provide a description of the physical, chemical and toxicological properties of the substance in place of its name. This information shall include all information reasonably available that might bear on the commissioner's decision regarding the application or the terms and conditions of the permit. This exception shall not apply to substances listed in Appendix B or D of this section, nor shall it prohibit the commissioner from requiring additional information up to and including the name of the substance if he or she deems necessary. However, in determining whether the name of the substance is necessary, the commissioner shall consult with the applicant and consider the need for confidentiality. Any production or effluent data which is required to be submitted pursuant to this subsection shall, for existing discharges, be based on actual production or effluent quality, and, for new discharges, be based on reasonable projections. If an applicant or permittee becomes aware of a change in any information submitted as part of an application for a permit, or that any such information was erroneous, or that any relevant facts were omitted from the application, he or she shall submit the correct information to the commissioner in writing within thirty days.

(1) The name (if a corporation transacting business in Connecticut, the full exact name as registered with the Secretary of the State), mailing and location addresses, and telephone numbers of the applicant, facility, facility owner and facility operator, and the operator's status as Federal, State, private, public or other entity.

(2) The date of the application and the date each discharge began or will begin.

(3) A brief general description of the nature of the business or activity and of each existing or proposed activity or process generating a discharge.

(4) For NPDES permits, for state permits for process wastewater discharges and for other state permits if required by the commissioner:

(A) The principal raw materials utilized, products produced or services provided. If a production-based effluent limitation has been adopted in subsection (1) of this section by reference to section 304 of the CWA, production figures shall be reported in the same units and for the same time period expressed in the limitation in subsection (1);

(B) Up to four SIC codes most applicable to the activities or services to be covered by the permit; and

(C) If any toxic or hazardous substance is anticipated to be used or present in a raw material or intermediate or final product or byproduct, a listing of each substance.

(5) A site plan and topographic map, drawn to scale with the scale shown, including a north meridian arrow. The site plan shall clearly show all buildings, actual and potential sources of discharge, and all intake and discharge locations including all wells where fluids from the facility are injected underground. The topographic map shall extend at least one mile beyond the property boundaries of the facility and clearly show the location of the facility in relation to all roads, surface waters, springs and wells. For NPDES permits, state permits for process wastewater discharges and for other state permits if requested by the commissioner, the applicant shall include on the site plan all fixed treatment, storage or disposal facilities for toxic or hazardous substances above or below ground and such other substances and types of facilities as the commissioner may direct. For NPDES permits for discharges from manufacturing, commercial, mining and silvicultural activities, the latitude and longitude of each discharge to the nearest fifteen seconds shall be reported. All roads and surface waters shall be named.

(6) The average and maximum amount of wastewater to be discharged per day or event. If different types of processes contribute to one discharge, each individual process type shall be so described. An identification of all types of wastes generated by each type of process shall be included. For privately owned treatment works, this information shall include the name and location address of all users of the system

(7) Average and maximum hours per day over which each discharge will occur.

(8) If any discharges are batch type, intermittent or seasonal, they shall be so described, including the frequency and duration of each.

(9) For process wastewater discharges and for other discharges if required by the commissioner, a list of names and maximum quantities of all substances which are stored on-site as designated on the site plan required under subdivision (c) (5) above. For all substances stored in containers of five gallons or less, this list may be limited to a generic description of the categories of substances stored and an estimate of the maximum total quantity of each category stored. The categories to be listed shall include acids, bases, cyanides, organic chemicals and heavy metals.

(10) For process wastewater discharges and for other discharges if required by the commissioner, a plan describing all provisions to prevent and control spills, leaks and other unplanned releases of all substances included in the inventory submitted under subdivision (c) (9) above, including but not limited to:

(A) An evaluation of each facility or system used for the storage, collection, transfer, treatment, loading or unloading of any such substances for its potential to generate a spill, leak or other unplanned release, and the maximum potential magnitude of such spill, leak or release.

(B) Provisions adequate to meet the requirements of subsection (p) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

The commissioner may exempt certain facilities included in the inventory submitted under subdivision (c) (9) above from the requirements of this subparagraph if in his or her judgement such facilities are unlikely to cause pollution.

(11) For process wastewater discharges and for other discharges if required by the commissioner, a complete description of the types of resource conservation practices and provisions for complying with the requirements of subsection (o) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(12) A description of the type, quantity and method of disposal of all process wastewaters which are not included in the discharges which are the subject of the application, including but not limited to screenings, sludges, oils, solvents and other chemicals. The commissioner may require the submission of a signed contract which provides for proper disposal of such wastes.

(13) An indication of whether the facility is or will be located either within the coastal boundary as defined by section 22a-94 of the General Statutes as amended (as delineated on maps contained in the appropriate town clerk's office) or on Indian lands. The commissioner may require the applicant to submit additional information to support a determination that the proposed activity is consistent with the provisions of sections 22a-94 through 22a-112 of the General Statutes, as amended.

(14) The names of the categories of discharge for which effluent limitations have been adopted in subsection (1) of this section, citing evidence and reasons why such categories are applicable.

(15) For any discharge from a manufacturing, commercial, mining, or silvicultural facility, a line drawing of the water flow through the facility with a water balance, showing all separate production operations contributing wastewater to the effluent and treatment units. The water balance must show approximate average and maxi-

mum flows at intake and discharge points and between units, including treatment units.

(16) A complete description of all collection and treatment facilities proposed or provided, including drawings to scale, describing in detail the existing or proposed means of complying with the applicable effluent limitations and conditions in subsection (1) of this section and section 22a-430-3 of the Regulations of Connecticut State Agencies. The commissioner may require that such drawings be prepared by an engineer licensed to practice in the State of Connecticut. Plans and specifications previously submitted and approved by the commissioner may be incorporated by reference, and shall be deemed to be a part of the current application.

(17) A general description of the methods and provisions for operation and maintenance of the collection and treatment facilities, including an operation and maintenance manual if required pursuant to subsection (f) of section 22a-430-3 of the Regulations of Connecticut State Agencies and documentation of any operator certification required under sections 22a-416-1 through 22a-416-10 of the Regulations of Connecticut State Agencies as amended. Manuals previously submitted may be incorporated by reference and shall be deemed to be part of the current application.

(18) For NPDES permits, a listing of all permits or construction approvals received or applied for under each of the following programs:

(A) Hazardous Waste Management program under RCRA or the Connecticut Hazardous Waste Management laws.

(B) UIC program.

(C) NPDES program.

(D) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(E) Nonattainment Program under the Clean Air Act.

(F) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.

(G) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.

(H) Dredge or fill permits under section 404 of CWA.

(I) State discharge permits issued under section 22a-430 of the Connecticut General Statutes.

(J) Other relevant environmental permits, including State permits.

(19) For NPDES permits, if the applicant is subject to any requirements or compliance schedules for construction, upgrading or operation of wastewater treatment facilities, an identification of the requirement, description of the project, and a listing of the required and projected final compliance dates.

(20) The following specific information shall be submitted for each discharge in each applicable discharge category listed below. When quantitative data is required by this subdivision, the applicant must collect a representative daily composite sample of the effluent and analyze it for the required parameters, and, for existing permitted discharges, except where grab samples are required, shall also report the average monthly and maximum daily concentrations for all parameters subject to a monitoring requirement in the applicant's existing permit for each of the most recent twelve months prior to the date of the application. When the applicant has two or more discharges in the same discharge category and all such discharges are of substantially identical effluent quality, the commissioner may allow the applicant to submit some or all of the information for only one discharge, and report that such information also applies to the other similar discharges. An applicant is expected

to know or have reason to believe or reasonably ascertain that a substance is present in a discharge based on an evaluation of the expected use, production, or storage of the substance, an investigation of the contents of raw materials, and on any previous analyses for the substance. A requirement that an applicant provide information for any such substances does not apply to substances present solely as a result of their presence in the intake water, however, an applicant must report such substances as present. Where chemical analyses are required, daily composite samples shall be used, except that grab sample averages shall be used for temperature, cyanides, total phenols, oil and grease and fecal coliform bacteria, and for pH and total residual chlorine, the range during the composite sample shall be reported. All samples shall be collected, handled and analyzed in accordance with methods listed or approved under 40 CFR Part 136. The commissioner may require the applicant to submit any or all data on which the following information is based.

(A) For permits for discharges of process wastewater, NPDES permits for discharges of sewage from a POTW or for domestic sewage from any other facility:

(i) For existing discharges and for new discharges if required by the commissioner, every applicant must report quantitative data for every discharge for the following parameters except that pH and temperature shall be reported as noted. The commissioner may waive the reporting requirements for one or more of the parameters listed in this subparagraph if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of the permit is otherwise available.

Biochemical Oxygen Demand (BOD)5′
Chemical Oxygen Demand,
Total Organic Carbon,
Oil and Grease,
Total Suspended Solids,
Ammonia (as Nitrogen),
Phosphorus (Total),
Maximum temperature (both winter and summer), and pH (minimum and maximum).

(ii) For existing discharges, and for new discharges if required by the commissioner, each applicant with processes in one or more primary industry categories listed in Appendix A contributing to a discharge shall report quantitative data for the following substances in each discharge containing process wastewater (except the cyanides and total phenol, for which the maximum concentration shall be reported):

(a) The substances in the fractions designated in Table I of Appendix B for the applicant's discharge category or categories. Table II of Appendix B lists the substances in each fraction. The commissioner's determination that an applicant falls within a particular discharge category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes.

(b) The substances listed in Table III of Appendix B.

(iii) For existing discharges and for new discharges if required by the commissioner, each applicant shall report for each discharge quantitative data for each of the following substances, if the applicant knows or has reason to believe or can reasonably ascertain that the substance is discharged or if an applicable limitation in subsection (1) directly or, through an indicator parameter, indirectly, limits the substance (except for oil and grease and fecal coliform bacteria, for which maximum concentration shall be reported):

(a) All substances listed in Table II or Table III of Appendix B for which such information is not otherwise required under subparagraph (20) (A) of this subsection.

(b) All substances in Tables IV and V of Appendix B.

(iv) For existing discharges of process wastewater, for new discharges if required by the commissioner and, for NPDES discharges from existing manufacturing, commercial, mining and silvicultural facilities, each applicant shall report quantitative data for 2,3,7,8- tetrachlorodibenzo-p-dioxin (TCDD) using a screening procedure not calibrated with analytical standards if the applicant:

(a) Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); 0,0-dimethyl-0 (2,4,5-trichlorophenyl); phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or

(b) Knows or has reason to believe or can reasonably ascertain that TCDD is or may be present in the discharge.

(v) Each applicant shall identify and provide a summary of the results of any biological toxicity tests which the applicant knows or has reason to believe have been made within the last three years on any of the applicant's discharges at the site in question or on any receiving water in relation to any such discharges.

(B) For NPDES permits for concentrated animal feeding operations and concentrated aquatic animal production facilities:

(i) For concentrated animal feeding operations:

(a) The type and number of animals in open confinement and housed under roof.

(b) The number of acres used for confinement feeding.

(c) The design basis for the runoff diversion and control system, if one exists, including the number of acres of contributing drainage, the storage capacity, and the design safety factor.

(ii) For concentrated aquatic animal production facilities:

(a) The maximum daily and average monthly flow from each discharge location.

(b) The number of ponds, raceways, and similar structures.

(c) For each species of aquatic animals, the total yearly and maximum harvestable weight.

(d) The calendar month of maximum feeding and the total mass of food fed during that month.

(C) For state permits for discharges of domestic sewage through land treatment non-point source discharge systems, including but not limited to septic tank leachfield subsurface sewage disposal systems:

(i) An engineering report including but not limited to the following information:

(a) Data of soils tests including but not limited to deep test pits, soil borings and permeability tests in sufficient numbers to define the hydrogeologic regime on the site. Such information shall include the dates of all testing.

(b) A description of any proposed treatment system to be utilized prior to land application of wastewater, including the estimated effluent quality.

(c) Calculations according to best engineering practices determining the application area, the hydrogeologic capability of the site to accept the volume of waste or wastewater and the ability of the site to renovate the waste or wastewater.

(d) A description of a proposed program to monitor the disposal system, the discharge or the effects of the discharge on the waters of the state.

(e) A description of any proposed fiscal or institutional controls intended to ensure the proper operation and maintenance of the system.

(ii) A preliminary plan drawn to a scale of one inch equal to fifty feet or less including but not limited to the following information:

(a) Property boundaries,

(b) Surface contours at two foot intervals in the proposed treatment area, including existing and proposed contours,

(c) The location of all soil tests on the property,

(d) Building locations and dimensions,

(e) Location of all watercourses and subsurface pipes,

(f) Location of all existing or proposed wells,

(g) A schematic diagram of the system proposed to treat the discharge including component elevations, and

(h) The location of all areas which have been designated as inland wetlands under section 22a-38 of the General Statutes, as amended.

(D) For discharges from agricultural activities, a farm waste management plan including but not limited to:

(i) A description of the nature of the agricultural activity.

(ii) Design drawings of facility components, prepared by the Soil Conservation Service or a professional engineer licensed to practice in the State of Connecticut.

(iii) If the wastewater is disposed of through land application, loading rates and number of acres available for crop growing purposes.

(E) For state permits for discharges of leachate from a solid waste disposal area to the surface waters, ground waters or to a sanitary sewerage facility, the following information:

(i) A detailed area map at a scale of approximately one inch equal to five hundred feet which shows topography and all pertinent features within a minimum one half mile radius of the boundaries of the disposal area, including but not limited to:

(a) structures,

(b) roads,

(c) drainage features including streams, ponds and designated inland or tidal wetlands,

(d) one hundred year flood boundary,

(e) rights-of-way including gas, electric, sewer and water,

(f) surficial and bedrock geology, as mapped,

(g) designated, in-use, or potential aquifers,

(h) areas within the coastal boundary as defined by section 22a-94 of the General Statutes, as amended,

(i) public water supply wells,

(j) any domestic water supply wells within one thousand feet of the site or within the existing and predicted leachate plume, and

(k) areas served by public water supply.

(ii) A detailed site map at a scale no greater than one inch equal to one hundred feet with the contour interval of two feet or five feet which shows the entire disposal area and the area of the existing and predicted leachate plume to the point of discharge to a surface water. The site map shall show:

(a) contours after site preparation,

(b) proposed final contours,

(c) existing and potential water table contours,

(d) section lines,

(e) all test pits, borings and monitor wells,

(f) all surface and ground water monitoring points and existing and proposed locations of fill limit markers,

(g) on-site buildings, fences, gates and roads,

(h) existing and proposed sedimentation and erosion controls, and

(i) area of the existing and predicted leachate plume.

(iii) A minimum of two cross sections through the site, one perpendicular and one parallel to the ground water flow, depicting existing, site preparation and final grades, water table, depth of existing and predicted leachate plume, bedrock surface and structure, and details (layering) of the unconsolidated deposits.

(iv) A report describing water quality impacts which includes:

(a) An explanation of the ground water contour map showing flow directions and area of the existing and potential maximum extent of leachate discharges to ground water (plume map). Water levels should be based on a minimum of two rounds of water level readings from all available wells, test pits, springs and borings; readings to be taken during spring high water levels, if possible.

(b) A description of the interaction between the surficial and bedrock geology, the ground water flow, surface waters and the leachate discharge, including all boring logs and monitor well construction details. Monitor wells shall be installed using methods and materials satisfactory to the commissioner.

(C) An estimate of the quantity of the proposed discharge volume on a monthly and annual basis using a water budget based on site area and infiltration rates.

(d) A characterization of the worst-case leachate quality based on waste type to be disposed of, by on-site testing, testing of similar landfills, or published literature.

(e) Using leachate indicators as defined in section 22a-430-3 of the Regulations of Connecticut State Agencies as amended, and any other substances as required by the commissioner, a prediction of the worst case leachate impact on the ground waters at the site boundary and surface waters at the downgradient end of the leachate plume. Surface water impacts shall be calculated using seven day, ten year low flows as obtained from stage measurements or calculated from the United States Geological Survey Connecticut Basin Reports. Water quality impacts from leachate shall be added to the existing background ground and surface water quality for each parameter.

(f) For existing discharges, the results of all background water quality data which has been collected. A minimum of two rounds of samples, one month apart, shall be collected from all monitor wells, and from up and downstream surface water locations. Representative nearby water supply wells shall be tested as required by the commissioner. Parameters tested shall include leachate indicators as defined in section 22a-430-3 of the Regulations of Connecticut State Agencies as amended and all parameters for which potable drinking water standards have been adopted by the Connecticut Commissioner of Health Services.

(g) A detailed discussion of the impact of the existing or proposed leachate discharge on ground waters, adjacent surface water, existing or potential water supply wells, and the conformance of the discharge with existing and proposed Connecticut Water Quality Standards.

(v) A description of the solid waste disposal area site operation and management as it relates to the existing or proposed leachate discharge, specifically addressing the following:

(a) Landfill area, volume, and estimated site life.

(b) Type of wastes to be accepted.

(c) An operational sequence that will minimize infiltration and maximize runoff of precipitation.

(d) A quarterly ground and surface water quality monitoring program.

(e) Closure with vegetation, soils, and slopes that will minimize infiltration.

(f) Post closure site maintenance and monitoring.

(vi) Any person or municipality may apply to the Commissioner for an amendment of a groundwater classification. A proceeding to amend a groundwater quality classification shall be conducted pursuant to Section 22a-426 of the General Statutes and Section 22a-3a-1 of the Regulations of Connecticut State Agencies. The Commissioner shall not reclassify groundwater quality as GC unless the applicant demonstrates that:

(a) The hydrogeology of the affected area precludes the development of high quality and high yield water supply;

(b) The hydrogeology of the affected area is suitable for the treatment of waste and;

(c) The criteria for issuance of a leachate discharge permit pursuant to Section 22a-430-4 of the Regulations of Connecticut State Agencies are met.

(vii) The Commissioner shall not issue a permit for the discharge of leachate from a solid waste disposal area unless:

(a) Assuming for purposes of analysis the absence of any means at such solid waste disposal area to collect or treat leachate, the discharge of such leachate would not pollute any receiving surface water classified as B or SB by the Water Quality Standards or interfere with the attainment of any water quality classification goal that has been adopted for such surface water in the Water Quality Standards;

(b) The permit applicant has the right of possession, by means of fee interest, easement, or otherwise, to the zone of influence of such solid waste disposal area and;

(c) No potable water supply well is located within the zone of influence of such solid waste disposal area and no potable water supply well is located such that recharge of such well from such zone of influence could be induced by pumpage, unless the permit applicant will, with the approval of the Commissioner and the agreement of the user of any such well, provide an alternate supply of potable water to such user.

In reviewing any application for a permit to discharge leachate from a solid waste disposal area, the Commissioner shall deem the capability of the pertinent geologic formation to treat the discharge to be the primary means of protecting the waters of the State from solid waste leachate.

(F) For discharges of non-contact cooling water and heat pump wastewaters which are not included in the definition of ''minor non-contact cooling water'' and ''minor heat pump wastewaters'' in subsection (a) of section 22a-430-3 of the Regulations of Connecticut State Agencies, and for blowdown from heating and cooling equipment, the following information:

(i) Maximum winter and summer temperatures.

(ii) Minimum and maximum pH.

(iii) Maximum daily concentration of Total Suspended Solids

(iv) A list of all water treatment chemicals added, including the average monthly and maximum daily concentrations of each.

(G) For permits for discharges of domestic sewage from a community sewerage system not owned by a municipality, a signed letter from the Water Pollution Control Authority of the municipality in which the system exists, indicating that such authority is satisfied that the proposed method of management of the system

complies with the provisions of section 7-246f of the Connecticut General Statutes, as amended.

(21) (A) Applicants for the following discharges shall submit a discharge toxicity evaluation:

(i) Existing NPDES discharges of process wastewater if the applicant or the commissioner knows or has reason to believe or can reasonably ascertain that:

(a) The discharge may contain one or more of the substances listed in Appendix B or D of this section or

(b) If the discharge can reasonably be expected to exhibit acute or chronic toxicity based on the results of acute or chronic toxicity tests or toxicity tests of similar discharges within the applicant's wastewater category as referred to in the Monitoring Schedule appended to Section 22a-430-3 of the Regulations of Connecticut State Agencies;

(ii) If required by the commissioner, new NPDES discharges of process wastewater, other NPDES discharges, and discharges of sewage from a POTW.

(B) Said evaluation shall describe water quality impacts of the discharge on the receiving water and include:

(i) Quantitative data describing the toxicity of the discharge including the results of acute or chronic toxicity tests, utilizing at least one fish species and one species of aquatic invertebrate organism as test species, on a minimum of three representative samples of the discharge. The commissioner may require additional testing or modification to the testing protocol or test species, where he or she has reason to believe that the results of tests by the applicant are or may be inconclusive due to the sampling and testing procedures employed or where the commissioner has reason to believe that acute or chronic toxicity data for an alternative species is needed to assess the impact of the effluent on the receiving waters;

(ii) Results of chemical analysis data for all samples collected for the purpose of toxicity testing under this subparagraph shall be provided for all substances for which monitoring has been required under the expired or expiring permit for the same discharge or for which effluent limitations or conditions have been established pursuant to subsection (1) of this section;

(iii) A detailed site plan at a scale no greater than one inch equal to one hundred feet with discharge dilution concentration contours labelled at intervals of no greater than ten percent of the receiving waters in the vicinity of the discharge under 7Q10 conditions. The location of all watercourses, discharges, wells, surface water intakes, designated inland or tidal wetlands, known or suspected shellfish beds, structural features such as bridges, culverts, dams, impoundments, and property boundaries shall be clearly marked;

(iv) Any other information the commissioner deems necessary;

(v) A detailed discussion evaluating the potential impact of the existing or proposed discharge on the receiving waters, based on the information required by paragraphs A (i), A (ii), A (iii), and A (iv) above, including, but not limited to an evaluation of the conformance of the discharge with both the Connecticut Water Quality Standards and any limitations established pursuant to subsection (1) of Section 22a-430-4 of the Regulations of Connecticut State Agencies.

(C) The commissioner may exempt applicants for NPDES permits from all or part of the testing, evaluation, and monitoring requirements specified in subparagraph (B) of this subdivision if a discharge toxicity evaluation has already been submitted and approved by the commissioner for the discharges in question in accordance with subsection (j) (ten) of Section 22a-430-3 of the Regulations of Connecticut

State Agencies, or if the applicant submits a written request including but not limited to:

(i) An estimate of the acute and chronic toxicity of the discharge based on a comparison of the concentration of substances responsible for such toxicity present in the discharge with one or more of the following:

(a) Water quality criteria for acute and chronic toxicity published pursuant to Section 304 (a) of the Clean Water Act. If more than one such substance is present in the discharge, the toxicity of the mixture shall be assumed to equal the sum of the toxicities of such individual substances which make up the mixture;

(b) The results of biological toxicity tests on individual substances present in the discharge or mixtures of substances similar to those present in the discharge. If more than one substance responsible for toxicity is present in the discharge, the toxicity of the mixture shall be assumed to equal the sum of the toxicities of such individual substances which make up the mixture. Where estimates of chronic toxicity are made based on the results of acute toxicity measures, chronic toxicity shall be assumed to occur at a concentration equal to one-twentieth (0.05) of the LC50 value determined in an acute toxicity test. The concentration of a substance or mixture of substances which will have no acute toxic effect on aquatic organisms of similar sensitivity to those organisms used in a toxicity test shall be assumed to be equal to one-third (0.33) of the measured LC50 value determined in an acute toxicity test;

(ii) The concentration of discharge anticipated to occur in the receiving waters following dilution and mixing of the discharge with the receiving waters during 7Q10 conditions pursuant to subdivision (1) (5) of this section;

(iii) A detailed discussion evaluating the potential impact of the existing or proposed discharge on the receiving waters, based on the information required by subparagraphs C (i) and C (ii) above, including but not limited to an evaluation of the conformance of the discharge with both the Connecticut Water Quality Standards and any limitations established pursuant to subsection (1) of this section;

(iv) Any other information the commissioner deems relevant.

(22) The commissioner may require applicants for state permits for discharges of process wastewater to a POTW to submit the information required under subparagraph (A) or (B), and subparagraphs (C), (D) and (E) inclusive of this subdivision:

(A) An estimate of the acute and chronic toxicity of the discharge based on a comparison of the concentration of substances responsible for toxicity present in the discharge with one or more of the following:

(i) Water quality criteria for acute and chronic toxicity published pursuant to Section 304 (a) of the Clean Water Act. If more than one substance responsible for toxicity is present in the effluent, the toxicity of the mixture shall be assumed to equal the sum of the toxicities of such individual substances which make up the mixture.

(ii) The results of toxicity tests on individual substances responsible for toxicity present in the discharge or mixtures of substances similar to those present in the discharge. If more than one such substance is present in the discharge, the toxicity of the mixture shall be assumed to equal the sum of the toxicities of the individual substances which make up the mixture. Where estimates of chronic toxicity are made based on the results of acute toxicity measures, chronic toxicity shall be assumed to occur at a concentration equal to one-twentieth (0.05) of the LC50 value determined in an acute toxicity test. The concentration of a substance or mixture of substances which will have no acute toxic effect on aquatic organisms of similar

sensitivity to those organisms used in a toxicity test shall be assumed to be equal to one-third (0.33) of the measured LC50 value determined in an acute toxicity test.

(B) If the commissioner determines that the information submitted under subparagraph (A) is or will be inconclusive, he or she may require the applicant to provide some or all of the following information:

(i) Quantitative data describing the toxicity of the discharge including the results of acute or chronic toxicity tests of the discharge individually, in combination with the discharge from the POTW or after treatment designed to represent that provided by the POTW. A minimum of three representative samples of discharge shall be tested utilizing at least one fish species and one species of aquatic invertebrate.

(ii) Results of chemical analysis of all samples collected for the purpose of acute or chronic toxicity testing under (B) (i) above. Results shall be provided for all substances for which monitoring has been required under the expired or expiring permit for the same discharge or for which effluent limitations have been established pursuant to subsection (1) of this section.

(C) The concentration of discharge anticipated to occur in the receiving waters following dilution and mixing of the discharge with the receiving waters during 7Q10 low flow conditions. The mean average daily flow from the POTW for the year preceding the date of permit application for the discharge shall be combined with the 7Q10 low flow in the receiving stream when determining the in-stream discharge concentration.

(D) The percentage of the total flow from the POTW represented by the discharge of the process wastewater discharge to the POTW under the following conditions:

(i) Mean average daily flow from the POTW for the year preceding the date of permit application for the permit to discharge to the POTW; and

(ii) The design flow rate of the POTW.

(E) A detailed discussion evaluating the potential impact of the existing or proposed discharge on the receiving waters, based on the information required by this subsection. This discussion shall include, but not be limited to an evaluation of the conformance of the discharge with both the Connecticut Water Quality Standards and any limitations established pursuant to subsection (1) of this section.

(23) If a contract laboratory or consulting firm performed any of the analyses required by this subsection, the identity of each laboratory or firm and the analyses performed.

(24) In addition to the above information, the commissioner may require an applicant or permittee to submit such other information as he or she deems reasonably necessary, including but not limited to additional effluent quality data, results of biological studies, necessary legal instruments and such other reports, plans and studies as may be required to show the effects of the discharge on the waters of the state and/or any receiving POTWs or the operation thereof.

(25) For general permits, as specified in subdivision (b) (6) of section 22a-430-3 of the Regulations of Connecticut State Agencies:

(A) For discharges to surface waters:

(i) The names, if any, of all receiving waters;

(ii) For stormwater discharges, a map delineating the geographic area to be covered by the general permit;

(iii) For potable water system flushing wastewaters, the number of discharge points and a map delineating the geographic area to be covered by the general permit;

(iv) For minor non-contact cooling water, minor heat pump wastewaters and minor blowdown from heating and cooling equipment, the maximum winter and

summer temperatures, maximum instantaneous flow rate, a list of all chemical additives and their maximum anticipated concentrations and a map showing the discharge locations;

(v) For hydrostatic pressure testing wastewaters and dewatering wastewaters, a list of all chemical additives and their concentrations, the number of discharge points and a map showing the discharge locations.

(vi) For groundwater contamination recovery systems for fuel oil and gasoline, a site plan drawn to a scale of no greater than one inch equals one hundred feet showing all recovery or interceptor wells, the estimated volume of product lost, and the names and addresses of the person contracted to clean up the contamination and the consultant hired to design the proposed remedial action program.

(B) For discharges to POTWs, all applicants shall submit the following information in addition to the information required for the specific discharge categories below: the frequency and average daily flow of each discharge and plans and specifications of any proposed treatment facilities:

(i) For photographic processing, the name and address of the person contracted for recovery of silver;

(ii) For groundwater contamination recovery systems for fuel oil and gasoline, a site plan drawn to a scale of no greater than one inch equals one hundred feet showing the location of all recovery or interceptor wells, the estimated volume of product lost, and names and addresses of the person contracted to clean up the contamination and the consultant hired to design the proposed remedial action program;

(iii) For vehicle service floor drain discharges, the name and address of the person contracted to remove waste oil and other chemicals from the facility, and specifications of the tank proposed to be used to store waste oil, if any;

(iv) For minor tumbling and cleaning of parts, a list of all additives to the wastewater, including both trade names, chemical names and their anticipated maximum concentrations in the wastewater for all cleaning agents added to the wastewater;

(v) For carpet and upholstery cleaners, a list of the trade names, chemical names and their anticipated maximum concentrations in the wastewater for all cleaning agents added to the wastewater;

(vi) For minor blowdown from heating and cooling equipment, a list of all additives to the wastewater, including all trade names, chemical names and their anticipated maximum concentrations in the wastewater;

(vii) For furniture refinishing rinsewaters, a list of all chemicals used in the stripping and refinishing process and the results of a daily composite sample for methanol, methylene chloride, lead, zinc, total volatile organics, and pH (range during composite);

(viii) For radiator repair facility rinsewater, the results of a daily composite sample for lead, zinc, copper, tin, chromium and pH (range during composite).

(C) For discharges to groundwaters:

(i) For swimming pool filter backwash, the distances to the nearest drinking water well and subsurface sewage disposal system, and a list of the chemical names of all additives to the swimming pool water;

(ii) For groundwater contamination recovery systems for fuel oil or gasoline, a site plan drawn to a scale of no greater than one inch equals one hundred feet showing the location of all interceptor or recovery wells, estimated volume of product lost and the names and addresses of the person contracted to clean up the

contamination and the consultant hired to design the proposed remedial action program.

(d) **Preliminary review.**

(1) Notwithstanding the provisions of section 22a-3a-1 of the Regulations of Connecticut State Agencies, upon receipt of an application for a new permit, the commissioner shall determine if all required information has been provided. If the commissioner determines that the application is incomplete or otherwise inadequate to allow a complete review, he or she shall so notify the applicant in writing within one hundred twenty (120) days of receipt of the application and state the reasons therefor.

(2) (A) Notwithstanding the provisions of section 22a-3a-1 of the Regulations of Connecticut State Agencies, the commissioner shall determine if an application for renewal is timely and sufficient in accordance with this subsection. If the application for renewal is untimely or insufficient, the commissioner shall send written notice to the applicant within one hundred twenty (120) days of receipt of the application and state the reasons therefor.

(B) A determination that an application for renewal is untimely shall be a final decision and shall cause the existing permit to expire on its original expiration date. If the commissioner determines that an application is timely but insufficient, the applicant shall be allowed ninety days from the issuance of the notice of insufficiency to submit the information specified in the notice. If during the review of such information the commissioner determines that additional information is necessary, he or she shall send notice to the applicant stating the reasons for the determination and the applicant shall be allowed an additional ninety days from the issuance of such notice to submit the information specified in the notice. If the applicant fails to submit the information specified in any notice of insufficiency within ninety days of issuance of such notice, the determination of insufficiency shall, at that time, become a final decision and the existing permit shall expire either upon its original expiration date or at the end of the ninety day period, whichever is later. If the applicant submits all necessary information in accordance with this subsection, the existing permit shall not expire until the end of the time period specified by section 4-182 (b) of the Connecticut General Statutes, as amended.

(C) Notwithstanding subparagraph (d) (2) (B) above, the commissioner may accept an untimely application no later than the expiration date of the permit and allow the existing permit to continue in effect beyond its original expiration date if, in his or her judgment, the permittee is likely to obtain a renewed permit upon reapplication and the public interest would best be served by allowing the permitted activity to continue uninterrupted.

(3) The completeness of an application shall be judged independently of the status of any other permit application or permit for the same facility or activity. The commissioner may delay processing a completed application if it is associated with another application which is incomplete or which may be denied.

(e) **Tentative determination.**

(1) If the commissioner determines that an application is complete, he or she shall make a detailed review of the application in order to tentatively determine whether the discharge will cause pollution of the waters of the state or whether any proposed system to treat the discharge will protect the waters of the state from pollution. In making such a determination, he or she shall determine that the following requirements will be met, as applicable:

(A) The effluent limitations and conditions listed in subsection (*l*) of this section, including any case-by-case determinations made under subsection (m) of this section.

(B) The treatment requirements listed in subsections (r) and (s) of this section.

(C) The prohibitions listed in subsection (t) of this section.

(D) The sludge disposal requirements listed in subsection (g) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(E) The bypass provisions of subsection (k) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(F) The resource conservation requirements of subsection (o) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(G) The spill prevention and control requirements of subsection (p) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(H) The instrumentation and related requirements of subsection (q) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(I) The equalization requirements of subsection (r) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(2) During such review the commissioner may require the submission of any additional information, results of analyses or data, the need for which becomes apparent upon review of the application, or the creation of any legal instruments which are necessary to properly evaluate the application. When such a tentative determination is made, the commissioner shall notify the applicant in writing of his or her tentative decision to deny the permit and the reasons therefor, or of his or her tentative decision to issue, renew or modify the permit, subject to the remaining requirements of the permit process. In making such a determination, the commissioner shall consider the factors specified in subdivisions (p) (2) and (3) of this section and may also consider any prior violation by the applicant of any statute or regulation administered by the commissioner, or any order or permit issued by the commissioner.

(3) When a public notice is required, a copy of the notice sent to the applicant shall constitute the tentative determination. For each tentative determination to issue, renew, modify or, for NPDES permits, revoke a permit, the commissioner shall prepare and submit a draft permit in accordance with subsection (f) of this section.

(4) If a public notice is not required in accordance with section 22a-430-2 of the Regulations of Connecticut State Agencies as amended, and if the applicant has made the demonstrations required by subparagraph (k) (1) of this section, the commissioner shall issue an approval of plans and specifications, which approval shall constitute the final determination under subsection (i) of this section.

(5) When the tentative decision is to deny the permit, the applicant may request a hearing as provided in section 22a-436 of the Connecticut General Statutes, as amended.

(f) **Draft permits, fact sheets.**

(1) When a tentative determination has been made in accordance with subsection (e) of this section to issue, renew, modify or, for NPDES permits, revoke a permit, the commissioner shall prepare a draft permit, which shall include all requirements and conditions, either expressly or by specific reference, proposed to be included in the final permit. A copy of the draft permit shall be sent with the tentative determination to the applicant, and to any other person who requests it. This subsection shall not apply to minor modifications under subsection (p) of this section. A copy of the application, not including any information to be held confidential pursuant to section 22a-6 of the Connecticut General Statutes as amended, shall be sent to any person who requests it.

(2) For NPDES permits only, a fact sheet shall be prepared with each draft permit and for each decision to revoke a permit, and shall briefly describe the significant factual, legal, methodological and policy issues addressed in the draft permit or decision to revoke which are not described in the public notice under subsection (g) of this section, including but not limited to:

(A) A brief summary of the basis for the draft permit conditions including references to applicable statutory and regulatory provisions.

(B) Reasons why any requested variances from any requirements of subsection (*l*) of this section are or are not justified.

(C) For every permit to be issued to a privately owned treatment works, an explanation of the commissioner's decision to either issue a permit with no conditions applicable to any user, to impose conditions on one or more users, to issue separate permits, or to require separate applications.

(D) Any calculations or other necessary explanation of the derivation of alternate effluent limitations and conditions which are not specifically set forth in subsection (*l*) of this section.

(E) When the draft permit contains any of the following conditions, an explanation of the reasons why such conditions are applicable: (i) limitations to control toxic pollutants, (ii) limitations on internal waste streams, (iii) limitations on indicator pollutants, and (iv) limitations established on a case-by-case basis in accordance with subsection (m) of this section.

(F) If appropriate, a sketch of the location of the discharge.

(g) **Public notice, notice of hearing.**

(1) General Public Notice. Except as provided in section 22a-430-2 of the Regulations of Connecticut State Agencies as amended, the commissioner shall prepare a public notice of (A) his or her intent to issue, renew, modify, deny or, for NPDES permits, revoke a permit; (B) a public hearing on the intent to issue, renew, modify, revoke or deny a permit; or (C) a new source determination made under 40 CFR section 122.29. Such public notices shall contain sufficient information to describe the proposal including but not limited to the following, as applicable:

(A) The applicant and facility name and mailing and location addresses.

(B) Application or permit number.

(C) A description of the business and activities generating each discharge, including all applicable discharge categories.

(D) A description of the location, volume, frequency and nature of the discharge, including the type of treatment provided and types of toxic pollutants (from Appendices B and D) present in the discharge; whether limits have been placed on internal waste streams and whether the draft permit contains limits or conditions established on a case-by-case basis in accordance with subsection (m) of this section.

(E) Name of the receiving waters.

(F) Name, business address and telephone number of a person from whom interested persons may obtain additional information, including copies of the draft permit, application and fact sheet, if any.

(G) A brief description of the procedures and time periods allowed for commenting on the proposal, the time, place and purpose of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision.

(H) An identification of all applicable limitations specifically established in subsection (*l*) of this section.

(I) A description of any variances from the requirements of subsection (*l*) of this section proposed to be granted.

(J) If a hearing is being scheduled, the dates of previous notices pertaining to the proposal in question.

(K) For NPDES permits only, when a request for a variance as provided in subparagraph (2) (A) (ii) of subsection (q) of this section is filed, the public notice shall include:

(i) A statement that the thermal component of the discharge is subject to effluent limitations in subsection (*l*) of this section and a brief description, including a quantitative statement, of the thermal effluent limitations proposed for the permit;

(ii) A statement that such a request has been filed and that an alternative less stringent effluent limitation may be imposed on the thermal component of the discharge and a brief description, including a quantitative statement of the alternative effluent limitations, if any, included in the request; and

(iii) If the applicant has filed an early screening request with the commissioner in accordance with 40 CFR 125.72, a statement that the applicant has submitted such a request.

(2) The Commissioner shall cause the public notice or notice of public hearing to be published in a newspaper or newspapers having a substantial circulation in the affected area.

(3) (A) The commissioner shall provide copies of all public notices to the chief elected official, director of health, and chairpersons of the planning, zoning and conservation commissions of the municipality in which the discharge is or will be located, and to those persons and municipalities who have requested to be put on a mailing list for that purpose.

(B) The commissioner shall provide copies of all public notices for NPDES permits to the following persons or agencies:

(i) Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management, the Advisory Council on Historic Preservation, State Historic Preservation Officers, and other appropriate government authorities, including any affected States;

(ii) The U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service;

(iii) Any user identified in the permit application of a privately owned treatment works;

(iv) Persons on a mailing list developed by:

(a) Including those who request in writing to be on the list;

(b) Soliciting persons from participants in past permit proceedings in that area; and

(c) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as regional and state funded newsletters, environmental bulletins, or the Connecticut Law Journal.

(v) Each state agency having any authority under state law with respect to the construction or operation of such facility.

(C) For NPDES permits, the commissioner shall send copies of all fact sheets, permit applications and draft permits to the Regional Administrator and the persons listed under subdivisions (3) (B) (i), (ii) and (iii) above. For permits for discharges to POTWs, the commissioner shall send copies of the public notice to the Regional Administrator and to the superintendent of the POTW.

(D) For state permits, copies of all draft permits, public notices and permit applications shall be sent to any person who requests them.

(E) Any person except municipal officials listed above may by written notice waive their right to receive public notices, fact sheets, draft permits, and permit applications, and the commissioner may then cease sending public notices to that person. The commissioner may also periodically update the list of recipients of such documents by sending a notice by certified mail requesting written indication of continued interest from those listed. The commissioner may delete from the list the name of any person who fails to respond to such request within thirty days.

(4) The commissioner may use any other method necessary to give actual notice of the action in question to any person potentially affected by it.

(h) **Public comments.** During the comment period specified in the public notices, which shall be a minimum of thirty days, any interested person or municipality, including the applicant or permittee, may submit written comments on the proposal which is the subject of the public notice and, if no hearing has already been scheduled, may request such a hearing in accordance with the requirements of section 22a-430 of the Connecticut General Statutes, as amended. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. A hearing shall be held upon receipt of a petition signed by at least twenty-five persons.

(i) **Final determination.**

(1) If public notice is given but no public hearing is held, the Director of Water Compliance shall review the application, supporting data, comments from Department staff and comments received during the comment period, and submit a report to the commissioner which incorporates or briefly describes and responds to all significant comments received, and recommends which provisions, if any, of the draft permit and tentative determination should be changed in the final determination and the reasons for any changes. If a public hearing is held on the application, the hearing officer shall submit such a report to the commissioner.

(2) The commissioner shall consider the report submitted to him in rendering a final determination which may authorize a subsequent action as described under section 22a-430 (b) of the Connecticut General Statutes as amended. A copy of the final determination and the report of the director or hearing officer shall be sent to the applicant or permittee and anyone else who requests it and shall be available to the public. Where no further action, including but not limited to construction of treatment facilities, is required, the final determination shall authorize, or may be incorporated in the issuance, renewal or modification of the permit.

(j) **Public hearings.** Public hearings shall be held pursuant to section 22a-430 of the Connecticut General Statutes as amended, in accordance with section 22a-3a-1 of the Regulations of Connecticut State Agencies, as amended.

(k) **Submission of plans and specifications. Approval.**

(1) If the applicant has received a final determination from the commissioner requiring the submission of plans and specifications or, if a public notice is not required, when submitting an application for a new, renewed or modified permit, the applicant shall, except as allowed under subparagraph (3) below, submit to the commissioner final construction plans and specifications and/or such other information as the commissioner deems necessary to demonstrate that (A) the existing or proposed system to treat the discharge is protecting or will protect the waters of the state from pollution and (B) the applicant is or, upon permit issuance, will be in compliance with all applicable requirements of section 22a-430-3 of the Regulations of Connecticut State Agencies and this section.

(2) Plans and specifications submitted under this subsection shall include at a minimum detailed drawings to scale of all collection, treatment and disposal facilities,

including all individual unit operations and their interconnection, and illustrative drawings of process controls, piping, instrumentation, chemical feed equipment and alarms. Non-structural provisions such as grading, seeding and filling activities shall be shown in as much typical detail as the commissioner determines is necessary to show the intended function of such provisions.

(3) If the commissioner determines that such a demonstration in subparagraph (1) above has been made, he or she shall notify the applicant in writing that the system for treating the discharge is approved, and shall include such conditions as may be necessary to ensure compliance with Chapter 446k of the General Statutes, section 22a-430-3 of the Regulations of Connecticut State Agencies and this section, as amended.

(4) If the commissioner determines that such a demonstration has not been made, he or she shall notify the applicant in writing that the application is denied and the reasons therefor.

(5) If any person has not completed construction of the system approved under subparagraph (3) of this subsection within two years of the approval, the commissioner may revoke such approval and require that a new application be submitted. The commissioner may also require submission of a new application under the following conditions:

(A) An application has been determined by the commissioner to be complete and, at the applicant's request, no further action is taken by the commissioner for more than one hundred and eighty (180) days from the date the application is determined to be complete.

(B) More than one hundred eighty (180) days has elapsed since the Commissioner rendered a final determination on an application and the applicant has made no further contact with the department regarding the application.

(C) For a new or modified permit, an application is determined by the commissioner to be incomplete and more than one hundred and eighty (180) days has elapsed since the commissioner's most recent written request to the applicant or his or her agent for additional information and the applicant has not submitted all of such information.

(*l*) **Establishing effluent limitations and conditions.**

(1) (A) The commissioner shall establish effluent limitations and/or other permit conditions for all discharges in order to protect the waters of the state from pollution, ensure compliance with Chapter 446k of the Connecticut General Statutes and regulations adopted thereunder and to ensure that his or her actions are consistent with the provisions of the CWA. Except as provided in subdivision (2) of this subsection, all such limitations and conditions shall be applied at the point of discharge.

(B) All permits shall contain, either specifically or by reference to the specific subsection, the requirements of subsections (b) and (d) through (r), inclusive, of section 22a-430-3 of the Regulations of Connecticut State Agencies and subsections (b), (*l*), (o), (r), (s) and (t) of this section.

(2) The commissioner may impose effluent limitations on internal wastewater streams before mixing with other wastewater streams in the following instances and, in such instances, the permit shall require that the monitoring required by subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies be applied to the internal wastewater streams instead of at the point of discharge:

(A) If effluent limitations or conditions imposed at the point of discharge would be impractical or infeasible;

(B) When monitoring the point of discharge would not provide meaningful information; or

(C) When effluent limitations or conditions are established specifically for the type of wastewater that comprises the internal wastewater stream.

(3) (A) Each permit shall include all applicable effluent limitations existing on the date of the final determination issued under subsection (i) of this section, except that if a new limitation is adopted between the date of the final determination and permit issuance, the permit shall include the new limitation including a compliance schedule to meet such limitation if necessary, which compliance schedule shall require compliance as soon as possible but no later than an applicable deadline for the limitation as specified in this subsection or five years beyond the date of the final determination, whichever is earlier. If it is necessary for the schedule to exceed nine months from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement, including progress reports where the time between interim dates would otherwise exceed nine months.

(B) Notwithstanding the limitations specified in the permit, (1) the commissioner may, as specified in subdivision (d) (4) of section 22a-430-3 of the Regulations of Connecticut State Agencies, issue an order or, as specified in subdivision (p) (5) of this section, modify the permit to establish more stringent effluent limitations, including a compliance schedule to meet such limitations if necessary; and (2) the permittee must comply with subdivision (e) (2) of section 22a-430-3 of the Regulations of Connecticut State Agencies regarding toxic pollutants.

(4) All permits shall include the effluent limitations and/or conditions contained in this subsection, as applicable. If more than one limitation or condition applies to the same substance, pollutant or situation, the more stringent requirement shall apply. If a discharge for which an effluent limitation is incorporated in this subsection by reference to the CWA or CFR is mixed with another discharge prior to treatment, the applicable limitations shall be adjusted in accordance with 40 CFR 403.6 (e) or on the basis of a case-by-case determination in accordance with subsection (m) of this section, whichever is more stringent.

(A) For NPDES permits, except as specified in subparagraphs (B) and (C) below:

(i) Best Practicable Control Technology Currently Available (BPT), if established for the discharge at 40 CFR Parts 405 through 470 in accordance with section 301 CWA, or, if not so established, as determined pursuant to subsection (m) of this section.

(ii) For the substances listed in Appendix C, Best Conventional Pollutant Control Technology (BCT), if established for the discharge at 40 CFR Parts 405 through 470 pursuant to section 301 CWA, or, if not so established, as determined pursuant to subsection (m) of this section.

(iii) For the toxic substances listed in Appendix D and which meet the requirements of subdivision (*l*) (4) (A) (xvi) below, Best Available Technology Economically Achievable (BAT) if established for the discharge at 40 CFR Parts 405 through 470 pursuant to section 301 CWA, or, if not so established, as determined pursuant to subsection (m) of this section.

(iv) For the toxic substances listed in Appendix B, which are not in Appendix D and which meet the requirements of subdivision (*l*) (4) (A) (xvi) below, BAT if established for the discharge at 40 CFR Parts 405 through 470 pursuant to section 301 CWA, or, if not so established, as determined pursuant to subsection (m) of this section.

(v) For the substances identified in 40 CFR Part 129, the applicable standards and prohibitions contained therein.

(vi) For other substances, no later than July 1, 1987, BAT if established for the discharge at 40 CFR Parts 405 through 470 pursuant to section 301 CWA or, if not so established, as determined pursuant to subsection (m) of this section.

(vii) For new sources, New Source Performance Standards (NSPS) if established for the discharge at 40 CFR Parts 405 through 470 in accordance with section 306 CWA.

(viii) Any other limitations or conditions established by EPA pursuant to the applicable requirements of sections 301, 302, 303, 306, 307, 318, and 405 of the CWA.

(ix) Applicable limitations or conditions listed in subsection (s) of this section.

(x) For any substance, limitations or conditions established in order to achieve consistency with the Connecticut Water Quality Standards or the Water Quality Standards of another state if the discharge affects that state, including consideration of the following factors:

(1) The physical, chemical, biological and hydraulic characteristics of the receiving waters.

(2) Acute and chronic toxicity to aquatic organisms.

(3) Bioaccumulation and persistence of toxic substances.

(4) Human health effects.

(5) Water quality criteria published pursuant to section 304 (a) of the Clean Water Act.

(6) Wasteload allocations.

(7) Results of effluent toxicity testing.

(8) Thermal impacts.

(9) Existing and future designated uses of the receiving waters.

(xi) For any substance, limitations or conditions established on a case-by-case basis in accordance with subsection (m) of this section, including those based on fundamentally different factors under 40 CFR Part 125, Subpart D.

(xii) (1) Except for POTWs, where production-based effluent limitations have been adopted under this subsection and as the commissioner otherwise deems necessary, effluent limitations shall be based on actual or reasonably anticipated production using the same time period expressed in any applicable limitation. For a facility discharging part of a wastewater stream to a POTW or to the ground or ground water, if the wastewater stream is subject to production-based mass limitations, the limitations shall be adjusted in direct proportion to the relative flows to surface waters, ground, groundwaters and/or POTW, unless a more stringent limitation has been adopted under this subsection.

(2) If the permit limitations are based on reasonably anticipated production, the permit shall require the permittee to notify the commissioner at least two business days prior to a month in which the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice shall specify the anticipated level and the period during which the permittee expects to operate at the alternate level. If the notice covers more than one month, the notice shall specify the reasons for the anticipated production level increase. New notice of discharge at alternate levels is required to cover a period or production level not covered by prior notice or, if, during two consecutive months otherwise covered by a notice, the production level at the permitted facility does not in fact meet the higher level designated in the notice.

(3) The permittee shall comply with the limitations that correspond to the lowest level of production specified in the permit, unless the permittee has notified the

commissioner under paragraph (2) above, in which case the permittee shall comply with the lower of the actual level of production during each month or the level specified in the notice.

(4) The permittee shall submit with its monitoring report required by subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies the level of production that actually occurred each month and the limitations applicable to that level of production.

(xiii) For continuous discharges other than those from POTWs, all effluent limitations shall, unless impracticable, be stated as maximum daily and average monthly limitations. For POTWs, all effluent limitations shall be stated as average weekly and average monthly limitations. For noncontinuous discharges, except stormwater, effluent limitations shall be established considering such factors as the frequency and rate of discharge and maximum batch concentration or quantity.

(xiv) All permit limitations shall be expressed in terms of mass except:

(1) pH, temperature, radiation and other substances which cannot appropriately be expressed in terms of mass;

(2) when applicable effluent limitations are expressed in terms of other units of measurement; or

(3) if in establishing effluent limitations on a case-by-case basis under subsection (m) of this section, limitations expressed in terms of mass are infeasible because the mass of the substance cannot be related to a measure of operation, and permit conditions ensure that dilution will not be used as a substitute for treatment.

(xv) If effluent limitations have been established in this subsection for a discharge, the permit limitations shall be expressed in the same units of measurement as the established effluent limitation, and may also be expressed in other units of measurement. If the permit includes limitations in terms of more than one unit of measurement, the permittee shall comply with both limitations.

(xvi) Effluent limitations shall be included in permits to control all toxic substances which the commissioner determines are or may be discharged at a level greater than the level which can be achieved by the applicable requirements of subparagraphs (*l*) (4) (A) (i) through (ix) of this section. The requirement that the limitations control all such substances will be satisfied by limitation on those substances or limitations on indicator substances which, in the judgment of the commissioner, will provide treatment of toxic substances to the levels required by subparagraphs (*l*) (4) (A) (i) through (ix) of this section.

(xvii) (1) Upon request of the discharger, the commissioner may adjust effluent limitations other than those established pursuant to subparagraph (4) (A) (x) of this subsection to reflect credit for substances in the discharger's intake water if the discharger demonstrates that the control system it proposes or uses to meet applicable limitations would, if properly operated and maintained, meet the limitations in the absence of such substances in the intake waters.

(2) Credit for substances other than generic substances shall be given only if the substances for which credit is requested are the same as the substances in the intake water which prevent compliance, except for generic substances. Credit for generic substances such as biochemical oxygen demand (BOD) or total suspended solids (TSS) shall not be granted unless the permittee demonstrates that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process wastewater substances.

(3) Credit shall be granted only to the extent necessary to meet the applicable limitation, up to a maximum value equal to the influent value. Additional monitoring

may be required by the commissioner to determine initial and on-going eligibility for credits and compliance with permit limits and the permit shall include all such additional monitoring requirements.

(4) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The commissioner may waive this requirement if he finds that no environmental degradation will result.

(5) This subdivision does not apply to the discharge of water production wastewaters.

(6) The discharger shall report any changes to his or her operation which may affect eligibility for intake credits in writing to the commissioner within thirty days of the change becoming effective.

(xviii) The commissioner may allow the use of techniques such as flow augmentation and in-stream aeration as a method of achieving water quality standards only when:

(1) After installation of the required technology, the permittee demonstrates that the applicable technology based effluent limitations of subparagraph (4) (A) (iii) of this subsection are not sufficient to achieve the standards;

(2) The permittee agrees to waive any opportunity to request a variance under subparagraph (2) (B) (ii) of subsection (q) of this section; and

(3) The permittee demonstrates to the commissioner's satisfaction that such a technique will better protect the environment than the use of other available methods such as advanced waste treatment, recycle and reuse, land disposal and changes in operating methods.

(xix) If the District Engineer of the U.S. Army Corps of Engineers advises the commissioner in writing that anchorage and navigation of any of the waters of the United States would be substantially impaired by the granting of a permit, and that imposing specified conditions upon the permit is necessary to avoid such impairment, then the commissioner shall include the specified conditions in the permit. Review or appeal of conditions required by the District Engineer or denial under subparagraph (p) (2) (D) of this subsection shall be made through the applicable procedures of the Corps of Engineers, and may not be made through the procedures specified in section 22a-430. If the conditions are stayed by a court of competent jurisdiction or by applicable procedures of the Corps of Engineers, those conditions shall be considered stayed in the NPDES permit for the duration of that stay.

(xx) If the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, or any other State or Federal Agency with jurisdiction over fish, wildlife, or public health advises the commissioner in writing that the imposition of specified conditions in the permit is necessary to avoid substantial impairment of fish, shellfish, or wildlife resources, the commissioner may include the specified conditions in the permit.

(xxi) Effluent limitations or conditions shall be included which meet the applicable requirements of 40 CFR Part 125 Subpart M for ocean dischargers.

(xxii) For a privately owned treatment works, any conditions in the permit issued to the treatment works expressly applicable to any discharger to the treatment works that may be necessary to enable the treatment works to comply with its permit. Alternatively, the commissioner may issue separate permits to the treatment works and any dischargers to it and may require separate applications from any such discharges.

(xxiii) When an NPDES permit is renewed or modified, it shall contain limitations, standards and conditions which are at least as stringent as the final limitations,

standards, and conditions in the previous permit unless (1) the circumstances on which the previous permit was based have changed and would, in accordance with subsection (p) of section 22a-430-3 of the Regulations of Connecticut State Agencies, constitute cause for modification or (2) when effluent limitations were imposed on a case-by-case basis in accordance with subsection (*l*) of this section in the previously issued permit and these limitations are more stringent than subsequently adopted limitations, and:

(1) The discharger has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations. In this case the limitations in the renewed permit may reflect the level of treatment actually achieved but shall not be less stringent than required by the subsequently adopted limitation; or

(2) The subsequently adopted limitations are based on BCT.

(xxiv) When a permit is issued to a facility which may operate at certain times as a means of transportation over water, it shall include conditions requiring compliance with applicable regulations promulgated by the Secretary of the department in which the U.S. Coast Guard is operating, that establish specifications for safe transportation, handling, carriage and storage of wastes.

(xxv) All effluent limitations for metals shall be in terms of the total recoverable metal, unless an applicable limit has been established under subsection (*l*) of this section for the dissolved or valent form, or unless all approved analytical methods inherently measure only the dissolved or valent form or unless the commissioner limits only the dissolved fraction.

(B) For NPDES permits for POTWs, the provisions of subparagraphs (*l*) (4) (A) (i) through (ix) of this section shall not apply, and the following limitations and conditions apply in addition to those specified in subparagraph (*l*) (4) (A) (x) through (xxiv):

(i) Limitations which are attainable through the use of secondary treatment as defined in subsection (r) of this section.

(ii) Any conditions imposed in grants made by the Administrator to POTWs under section 201 and 204 CWA, or by the commissioner under section 22a-439-1 through 22a-439-4 of the Regulations of Connecticut State Agencies as amended, which are necessary to ensure compliance with applicable effluent limitations.

(iii) Any conditions regarding the disposal of sewage sludge, required by section 405 of the CWA or regulations adopted thereunder.

(iv) Effluent limitations shall be based on design flow.

(C) For NPDES permits for facilities discharging only domestic sewage which are not POTWs, the provisions of subparagraphs (*l*) (4) (A) (i) through (ix) of this section shall not apply. In addition to the limitations and conditions specified in subparagraphs (*l*) (4) (A) (x) through (xxv), the permittee shall meet BAT if established for the discharge at 40 CFR parts 405 through 470 pursuant to section 301 CWA or, if not so established, the requirements listed in subsection (r) of this section or limitations established on the basis of a case-by-case determination in accordance with subsection (m) of this section, whichever are more stringent.

(D) For permits for discharges to POTWs:

(i) If established for the discharge at 40 CFR Parts 405 through 470 in accordance with section 307 CWA, PSNS for new sources and PSES for all other discharges. Existing discharges to surface waters or ground waters which are redirected to a POTW after adoption of a pretreatment standard shall meet PSES, unless the dis-

charge is a new source, in which case PSNS requirements shall be met at the time the redirected discharge is commenced.

(ii) Applicable limitations listed in subsection (s) of this section.

(iii) For any substance, limitations or conditions established on a case-by-case basis in accordance with subsection (m) of this section.

(iv) For any substance, limitations or conditions established in order to achieve consistency with the Connecticut Water Quality Standards or the Water Quality Standards of another state if the discharge affects that state, including consideration of the following factors:

(a) The physical, chemical, biological and hydraulic characteristics of the receiving waters.

(b) Acute and chronic toxicity to aquatic organisms.

(c) Bioaccumulation and persistence of toxic substances.

(d) Human health effects.

(e) Water quality criteria published pursuant to section 304 (a) of the Clean Water Act.

(f) Wasteload allocations.

(g) Results of effluent toxicity testing.

(v) Limitations or conditions established in order to ensure compliance with subsection (t) of this section.

(vi) When a permit is renewed or modified for a discharge to a POTW, it shall contain effluent limitations which are at least as stringent as the effluent limitations in the previous permit, unless (1) the circumstances or information on which the previous permit was based have changed and would, in accordance with subsection (p) of this section, constitute cause for modification or (2) if the discharger has installed the treatment facilities required to meet the effluent limitations in the previous permit and has shown to the commissioner's satisfaction that he or she has properly operated and maintained the facilities but has nevertheless been unable to meet the previous limitations. In this case the limitations in the renewed permit may reflect the level of treatment actually achieved but shall not be less stringent than required by any limitation specified in subparagraph (*l*) (4) (D) of this section other than under (D) (iii).

(E) For permits for discharges to the ground waters of the state:

(i) Applicable limitations listed in subsection (s) of this section.

(ii) For any substance, limitations or conditions established on a case-by-case basis in accordance with subsection (m) of this section.

(iii) For any substance, limitations or conditions established in order to achieve consistency with the Connecticut Water Quality Standards or the Water Quality Standards of another state if the discharge affects that state, including consideration of the following factors:

(a) The physical, chemical, biological and hydraulic characteristics of the receiving waters.

(b) Acute and chronic toxicity to aquatic organisms.

(c) Bioaccumulation and persistence of toxic substances.

(d) Human health effects.

(e) Water quality criteria published pursuant to section 304 (a) of the Clean Water Act.

(f) Wasteload allocations.

(g) Results of effluent toxicity testing.

(F) The commissioner may include any other condition in a permit which he or she deems reasonably necessary to ensure compliance with chapter 446k of the Connecticut General Statutes and regulations adopted thereunder as amended, to ensure that his or her actions are consistent with the CWA and to ensure proper operation of a treatment facility or any other part thereof.

(5) (A) No discharge may cause acute or chronic toxicity in the receiving water, either singly or in combination with other discharges considering any zones of influence established consistent with the Connecticut Water Quality Standards, as amended. Limitations on toxicity may be expressed in terms of the percent concentration of discharge in the receiving water below which no acute or chronic toxicity will occur. Compliance with limitations on toxicity shall be determined as follows:

(i) For acute toxicity, based on the results of acute toxicity tests conducted on representative samples of the discharge in accordance with subsection (j) of Section 22a-430-3 of the Regulations of Connecticut State Agencies. A discharge shall be considered acutely toxic if the LC50 concentration multiplied by an application factor of 0.33 is less than the discharge limitation expressed above with the exception of discharges which exceed thirty three percent concentration in the receiving water in which case the discharge will be considered acutely toxic if the NOAEL concentration is less than the discharge limitation expressed above.

(ii) For chronic toxicity, based on the results of acute toxicity tests conducted on a representative sample of the discharge in accordance with subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies. A discharge shall be considered chronically toxic if the LC50 concentration multiplied by an application factor of 0.05 is less than the discharge limitation expressed above, with the exception of discharges which exceed fifteen percent concentration in the receiving water in which case the discharge will be considered chronically toxic if the NOAEL concentration multiplied by an application factor of 0.15 is less than the discharge limitation expressed above.

(iii) In lieu of determining compliance with chronic toxicity limitations pursuant to subparagraph (A) (ii) above, the commissioner may determine compliance based on any other information he or she deems relevant including but not limited to the information specified in subparagraph (*l*) (5) (A) (v) of this section and subparagraph (j) (7) (B) (i) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(iv) In determining compliance with discharge limitations on acute and chronic toxicity the arithmetic average of all total daily flows for all operating days within the previous thirty consecutive operating days may be used in lieu of the permitted average flow provided the total flow for any single operating day does not exceed the average daily flow for the previous thirty consecutive operating days by more than twenty-five (25) percent. In making such a determination, the commissioner may consider the hours of operation of the facility.

(v) Mixing of a discharge with receiving water provides for no reduction in the toxicity of that discharge with the exception of that which occurs due to dilution of the discharge unless the applicant demonstrates to the satisfaction of the commissioner that the physical or chemical composition of the receiving waters has a measurable capacity to assimilate toxicity present in the discharge or that one or more of the chemical substances present in the discharge degrade rapidly due to naturally occuring physical, chemical, or biological processes in the receiving water rendering the discharge less toxic than can be accounted for by dilution alone. Demonstration of the existence, magnitude, and rate of the above mentioned processes shall be accomplished through submission of the following:

(a) Acute or chronic toxicity test data comparing the toxicity of representative discharge samples diluted with water taken from the receiving water with the toxicity of aliquots of these same samples diluted with synthetic freshwater, estuarine water, or marine water used to determine compliance with discharge limitations for toxicity;

(b) Physical and chemical analysis data concerning the degradation of substances responsible for toxicity known to be present in the discharge and responsible for discharge toxicity following discharge to the receiving waters. This data shall be collected under conditions which can reasonably be expected to occur at the discharge site during 7Q10 conditions or such other low flow conditions consistent with the Connecticut Water Quality Standards as amended and may include data collected in the receiving waters at the discharge site; a summary of data collected at other similar sites; laboratory studies designed to mimic natural conditions; and any other information the commissioner deems relevant.

(c) The results of chronic toxicity tests conducted on representative samples of the effluent in accordance with subdivision (10) of subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies.

(B) The commissioner may establish seasonal permit limitations for acute and chronic toxicity pursuant to subparagraph (A) of this subdivision provided the applicant demonstrates to the satisfaction of the commissioner that:

(i) Appropriate facilities have been installed or operational modifications made to adequately regulate and control the rate of discharge and toxicity of the effluent, for each seasonal permit period, and

(ii) Seasonal permit limits will result in no acute or chronic toxicity in the receiving water during each seasonal permit period including consideration of the expected composition of the aquatic biological community during each seasonal permit period with respect to the possible presence of sensitive life stages or events such as migration and spawning which may occur during the seasonal permit period.

(C) Notwithstanding the provisions of subparagraphs (A) and (B) of this subdivision, the commissioner may determine that water quality-based effluent limitations to protect aquatic organisms from chronic toxic impacts are not required provided:

(i) The applicant demonstrates to the satisfaction of the commissioner that no reasonable relationship exists between the economic and social costs of attaining the objectives of the Federal Clean Water Act and section 22a-430 of the Connecticut General Statutes, including attainment of the uses designated for the receiving waters in accordance with the Connecticut Water Quality Standards, and the benefits to be gained by achieving the above mentioned objectives pursuant to the provisions of section 302 of the Federal Clean Water Act, and;

(ii) The applicant conducts a use attainability analysis according to the practices and procedures set forth in the Federal Water Quality Standards Regulations (48 FR 51400) demonstrating to the satisfaction of the commissioner that the designated uses for the receiving waters established in the Connecticut Water Quality Standards can not be attained regardless of the type and degree of treatment provided to the effluent, including elimination of the discharge from the receiving stream.

(D) Except as allowed by subparagraph (D) (iii) below for chronic toxicity, limitations on acute and chronic toxicity established in accordance with subparagraph (*l*) (5) (A) above shall be incorporated in permits in accordance with the following schedule:

(i) For new and renewed permits, upon permit issuance or renewal.

(ii) For existing permits, through permit modification, no earlier than July 1, 1988, if the results of testing required by subparagraph (10) (A) of subsection (j)

of section 22a-430-3 of the Regulations of Connecticut State Agencies have been submitted to the commissioner, and at any time after January 1, 1989 notwithstanding compliance by the permittee with such requirements.

(iii) In the case of an existing discharge, an applicant or permittee may elect to undertake additional studies, or provide additional documentation or other information in accordance with subparagraph (j) (7) (B) (i) of section 22a-430-3 of the Regulations of Connecticut State Agencies in order to justify alternative limitations on chronic toxicity only. The applicant or permittee must notify the commissioner of his or her intent in this regard, either as part of the report required by subparagraph (j) (10) (A) of section 22a-430-3 of the Regulations of Connecticut State Agencies, or with the permit renewal application, whichever required date is earlier. If such a notification is received by the commissioner in a timely manner, the limitations on chronic toxicity shall be incorporated in the permit no earlier than July 1, 1990. Such notification shall not stay the incorporation of acute toxicity limitations in accordance with subparagraphs (D) (i) and (D) (ii) above.

(m) **Case-by-case determinations**

(1) In establishing permit limitations or conditions on a case-by-case basis pursuant to subsection (*l*) of this section, the commissoner shall consider the following factors: the impacts of the discharge on the receiving waters or its use or any sewerage system or the operation thereof, treatability of the wastewater in question, potential for spills, leaks or other uncontrolled releases, including but not limited to releases of toxic organic chemicals, and any other factors which he or she deems necessary. In making such an evaluation, the commissioner shall consider the discharge both alone and in combination with other discharges to the same receiving waters.

(2) Prior to establishing effluent limitations or conditions on a case-by-case basis, the commissioner shall determine that the facilities, procedures or means required to meet those limitations and conditions are (A) successfully employed by a reasonable number of dischargers of the type of wastewater in question or (B) capable of treating the wastewater to the degree required without creating an undue burden on the discharger. In the case of NPDES permits, in determining whether an undue burden will be created, the commissioner shall consider the factors listed at 40 CFR 125.3 (D).

(n) **Permit issuance or renewal.**

(1) When the applicant has verified in writing to the commissioner that he or she has installed the system for treating the discharge in full compliance with the approval issued under subsection (k) of this section and has complied with all conditions of said approval or the final determination issued under subsection (i) of this section, and the commissioner is satisfied that the system has been so installed, or when the final determination has authorized the issuance, renewal or modification of the permit, the commissioner shall issue, renew or modify the permit. The permit shall be subject to the requirements of section 22a-430 (c) and shall contain all applicable requirements of this section and section 22a-430-3 of the Regulations of Connecticut State Agencies either specifically or by reference to a specific section.

(2) A copy of the final permit shall be sent to the applicant, any other person or municipality requesting a copy, and, for NPDES permits only, the Regional Administrator.

(o) **Permit or Application Transfer.**

A permit or application may not be transferred without the prior written approval of the commissioner. To request such approval, a permittee or applicant shall, at

least thirty days prior to the proposed transfer date, submit to the commissioner a written agreement between the existing and new permittee or applicant which contains a specific date for the transfer of permit responsibility and coverage between them and is signed by all parties in accordance with subparagraph (b) (2) (A) of section 22a-430-3 of the Regulations of Connecticut State Agencies. Upon review of such agreement, the commissioner shall either send a notice to the permittee or applicant denying the request and briefly stating the reasons for such denial, or approve the transfer by letter in the case of a transferred application or, for a transferred permit, modifying the permit in accordance with subsection (p) of this section to identify the new permittee and incorporate such other requirements as may be necessary. In reviewing a transfer request, the commissioner may consider any noncompliance by the transferee with any statute or regulation administered by the commissioner or any order or permit issued by the commissioner. In lieu of denial of the transfer, the commissioner may require the transferee to submit an application for a new permit or a modified permit.

(p) **Permit revocation, denial or modification.**

(1) The commissioner may revoke or modify a permit on his or her own initiative or on request of the permittee or any other person or municipality for the reasons specified in this subsection. All requests shall be in writing and contain facts and reasons supporting the request. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. The commissioner shall notify the person making the request and the permittee in writing of the disposition of the request within ten days of making a decision.

(2) The commissioner shall deny a permit application in the following circumstances:

(A) When the commissioner determines in accordance with subsection (e) of this section that the imposition of conditions cannot ensure that the discharge, either singly or in combination with other discharges, (i) would not cause or contribute to pollution or that any proposed system to treat the discharge will protect the waters of the state from pollution as determined in accordance with subsection (e) of this section, (ii) would not endanger human health or the environment or (iii) would be consistent with the Connecticut Water Quality Standards and the water quality standards of another state.

(B) For a new discharge or a new source discharging into a water body which does not meet the Connecticut Water Quality Standards, if a waste load allocation has been developed for that water body, and if insufficient allocations exist for that discharge, or if any discharges into the water body existing at the time of the application are not yet subject to compliance schedules to bring the water body back into compliance with the Water Quality Standards.

(C) When the conditions of the permit do not assure compliance with chapter 446k of the Connecticut General Statutes and regulations adopted thereunder as amended, or when the issuance of the permit would not be consistent with the provisions of the Clean Water Act.

(D) When, in the judgment of the Secretary of the Army, anchorage and navigation would be substantially impaired by the discharge.

(E) For the discharge of any radiological, chemical or biological warfare agent or high level radioactive waste.

(F) For NPDES permits only, when the Regional Administrator objects to the issuance of the permit as allowed under 40 CFR Part 123.44.

(G) Where he or she has insufficient information to determine whether the applicant will be able to comply with chapter 446k of the Connecticut General Statutes and regulations adopted thereunder as amended.

(3) The commissioner may deny a permit application in accordance with section 22a-430 of the Connecticut General Statutes and section 22a-3a-1 of the Regulations of Connecticut State Agencies as amended for the following reasons:

(A) Noncompliance by the permittee with any statute or regulation administered by the commissioner, or any order or permit issued by the commissioner; or

(B) The applicant's failure in the permit issuance process to submit a completed application or disclose fully all relevant facts, or to comply with any conditions of an approval issued pursuant to subsection (k) of this section, or the applicant's misrepresentation of any relevant facts at any time.

(4) The commissioner may revoke a permit during its term in accordance with section 4-182 (c) of the Connecticut General Statutes as amended, for the following reasons:

(A) Noncompliance by the permittee with any statute or regulation administered by the commissioner, or any order or permit issued by the commissioner;

(B) The applicant's failure in the permit issuance process to submit a completed application or disclose fully all relevant facts, or the applicant's misrepresentation of any relevant facts at any time;

(C) The discharge is likely to endanger human health or the environment and the commissioner determines that permit revocation or denial is necessary to alleviate such danger; or

(D) A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge authorized by the permit, including but not limited to plant closure or connection to a POTW.

(5) (A) The commissioner may modify a permit during its term in accordance with this section for the reasons specified in subdivision (4) of this subsection or for any reason specified in subdivision (d) (4) of section 22a-430-3 of the Regulations of Connecticut State Agencies or 40 CFR 122.62, provided:

(i) Such modification can not reasonably be expected to result in pollution of the waters of the state, or any other condition which would violate the provisions of Chapter 446k of the General Statutes, or regulations adopted thereunder as amended;

(ii) Such modification will result in a permit no less stringent than allowed by the Clean Water Act and the Safe Drinking Water Act and regulations adopted thereunder; and

(iii) Such modification does not extend the term of the permit unless such modification is also part of a permit renewal.

(B) The commissioner may make the following minor modifications to a permit with or without following the procedures specified in subsection (g) of this section.

(i) correct typographical errors;

(ii) with the consent of the permittee, require more or less frequent or new monitoring or reporting by the permittee, provided the minimum requirements of subsection (j) of section 22a-430-3 of the Regulations of Connecticut State Agencies are met, and the new monitoring does not authorize the discharge of a substance not authorized by the previous permit;

(iii) with the consent of the permittee, change an interim compliance date in a schedule of compliance, provided, for NPDES permits only, the new date is not more than one hundred twenty (120) days after the date specified in the existing

permit and does not interfere with attainment of the final compliance date requirement;

(iv) with the consent of the permittee, transfer ownership or operational control of a facility where the commissioner determines that no other change in the permit is necessary, provided the procedures specified in subsection (o) of this section are followed;

(v) with the consent of the permittee, delete a discharge, pollutant or substance from the permit when the discharge or the use of the pollutant or substance is terminated or if the pollutant or substance was never used, and the change does not result in a discharge from another location, except in accordance with existing permit limits; or

(vi) bring the permittee into conformance with a new or revised method of collection or treatment approved by the commissioner, provided such minor modification does not result in a permit which is less stringent than the existing permit.

(vii) With the consent of the permittee, make limitations on existing pollutants or other permit conditions more stringent, including the addition of limitations on acute and chronic toxicity in accordance with subsection (*l*) of this section.

(C) For NPDES permits only, if any limitation on a toxic substance is adopted in subsection (*l*) of this section by incorporation by reference to section 307 (A) of the CWA, and that limitation is more stringent than any limitation in the permit or affects a substance not already limited in the permit, the commissioner shall modify the permit in accordance with this subsection.

(D) When the commissioner intends to modify a permit, he or she shall indicate in the public notice those terms and conditions which he or she proposes to modify and any other terms and conditions which are subject to revision. Only those provisions which are specified as subject to revision may be modified. The permit as modified shall continue in effect for the remainder of its original term.

(E) The commissioner may require the applicant to submit a complete application for renewal of a permit in lieu of a request for modification.

(6) The permittee shall comply with all conditions of the existing permit until the permit is revoked or modified.

(q) **Variances**

Variances from the requirements of subsection (*l*) of this section which are specified in this subsection may be granted by the commissioner in accordance with the following procedures:

(1) General

(A) All variance requests shall be submitted in writing by the applicant as part of an application for permit issuance, renewal or modification under subsection (a) or (b) of this section, and shall include information which the commissioner determines is necessary to review the request, including but not limited to the following:

(i) The requirement from which the variance is requested;

(ii) A description of the variance sought;

(iii) Documentation that alternatives exist or, for new discharges, will be provided, which ensure protection of the environment and the public health, safety and welfare at least equivalent to the requirement, and that such requirement is clearly not justified.

(B) No variance from any provision of this section or section 22a-430-3 of the Regulations of Connecticut State Agencies may be granted unless it is authorized by this subsection, and no variance may be granted which violates or results in a violation of or inconsistency with the Connecticut General Statutes or the Connecticut

Water Quality Standards, or which creates a real or potential threat to public health, safety or welfare or the environment, or which causes an adverse impact on the operation of any sewerage system, or existing or proposed method of sludge disposal for such system.

(C) In requesting renewal of a permit which includes a variance, the applicant shall apply for and justify the renewal of said variance in accordance with the provisions of this subsection.

(D) The commissioner may grant a variance from the technology requirements of subdivision (1) of subsection (s) of this section if the applicant demonstrates to the satisfaction of the commissioner that the proposed alternative is capable of meeting the applicable effluent limitations required in subsection (s) of this section.

(E) The commissioner may limit the duration of a variance and include in a variance any conditions which he or she deems necessary. A variance may be revoked or modified for failure to comply with any such condition.

(F) For discharges to POTWs, the commissioner may include in a permit any variances granted by EPA based on fundamentally different factors in accordance with the criteria and procedures provided in 40 CFR 403.13 and in this subsection.

(G) For existing discharges only, the commissioner may grant a variance which allows less stringent effluent limitations than those listed in subparagraph (2) of subsection (s) of this section, but in no case less stringent than any other limitations required by subsection (*l*) of this section, based on a showing by the applicant that he or she has:

(i) Installed and operated facilities meeting the applicable technology requirements of subparagraph (1) of subsection (s) of this section in a manner approved by the commissioner;

(ii) Demonstrated that such limitations are not achievable using such facilities;

(iii) Demonstrated that reasonable adjustments or additions to the treatment or production facilities will not result in compliance with such limitations, including but not limited to the use of alternate treatment chemicals, variation of treatment conditions, raw material substitution and additional control facilities; and

(iv) Submitted an application for a permit modification or renewal which documents the actual level of treatment attainable by the installed facilities and which specifies the alternate limitation(s) requested.

(2) Additional Variances for NPDES Permits, except Discharges from POTWs

(A) The commissioner may grant or deny requests for the following variances, subject to EPA objection:

(i) After consultation with the Regional Administrator, extensions of the deadline for BAT based on the use of innovative technology, in accordance with the criteria and procedures specified in 40 CFR Part 125 Subpart C.

(ii) Alternate effluent limitations for thermal discharges in accordance with the criteria and procedures specified in 40 CFR Part 125 Subpart H. The applicant shall send a copy of any variance request submitted under this paragraph to the U.S. Secretary of the Interior and Secretary of Commerce.

(B) The commissioner may deny, or forward to the Regional Administrator with a written concurrence, or submit to EPA without recommendation a completed request for:

(i) A variance based on the presence of fundamentally different factors in accordance with 40 CFR Part 125 Subpart D. Such request shall explain how the requirements of 40 CFR Part 125 Subpart D have been met.

(ii) A variance for any discharger which is not a POTW from the BAT limitations for non-conventional pollutants in accordance with 40 CFR Part 125 Subpart F, pursuant to section 301 (g) CWA because of the environmental considerations specified therein, when those limitations were adopted in subsection (*l*) of this section by incorporation by reference to the CWA or CFR. This variance is only available for effluent limitations adopted after December 27, 1977, and must be filed no later than 270 days after the adoption of the applicable limitation and must demonstrate that the requirements of 40 CFR Part 125 have been met.

(C) The commissioner may grant variances from the secondary treatment requirements of subparagraph (r) (1) of this subsection in accordance with this subsection and subparagraphs (r) (2) and (r) (3) of this section.

(r) **Secondary treatment requirements for POTWs and facilities discharging only domestic sewage to surface waters:**

(1) The following effluent limitations shall apply:

(A) Biochemical oxygen demand (five day).

(i) The average concentration of all daily composite samples taken over any thirty consecutive day period shall not exceed 30 milligrams per liter.

(ii) The average concentration of all daily composite samples taken in any seven consecutive day period shall not exceed 45 milligrams per liter.

(iii) The maximum daily concentration shall not exceed 50 milligrams per liter.

(iv) The average effluent concentration shall not exceed 15 percent of the average influent concentration for all daily composite samples taken in any thirty consecutive day period.

(B) Suspended solids.

(i) The average concentration of all daily composite samples taken in any thirty consecutive day period shall not exceed 30 milligrams per liter.

(ii) The average concentration of all daily composite samples taken in any seven consecutive day period shall not exceed 45 milligrams per liter.

(iii) The maximum daily concentration shall not exceed 50 milligrams per liter.

(iv) The average effluent concentration shall not exceed 15 percent of the average influent concentration for all daily composite samples taken in any thirty consecutive day period.

(C) pH. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the permittee demonstrates as part of an application for permit issuance, renewal or modification, that:

(i) Inorganic chemicals are not added to the waste stream as part of the treatment process; and

(ii) Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

(2) Certain POTWs may not be capable of meeting the percentage removal requirements of subparagraph (1) of this subsection during wet weather if they receive flow from combined sewers (sewers which are designed to transport both storm water and sanitary sewage). For such POTWs, the commissioner may determine an alternate required percentage removal level unless another more stringent requirement applies under subsection (*l*) of this section.

(3) For certain process wastewater discharges, the allowable discharge to surface waters of biochemical oxygen demand and suspended solids permitted in an NPDES permit may be less stringent than the values given in subparagraph (1) of this subsection. In cases where wastes would be introduced from such an industrial category into a publicly owned treatment works, the commissioner may increase

the effluent limitations for the POTW for biochemical oxygen demand and suspended solids beyond those listed in subparagraph (1) (A) of this subsection provided:

(i) The permitted discharge of such pollutants, attributable to the process wastewater discharge, would not be greater than that which would be permitted under an NPDES permit for such discharge directly into the surface waters, and

(ii) the flow or loading of such pollutants introduced by the process wastewater discharge exceeds ten (10) percent of the design flow or loading of the publicly owned treatment works. When such an adjustment is made, the values for biochemical oxygen demand or suspended solids in subparagraph (1) of this subsection should be adjusted proportionally.

(s) **Treatment requirements**

(1) For metal finishing discharges, nonferrous metals manufacturing discharges, iron and steel manufacturing discharges, electrical and electronic components discharges, aluminum forming discharges, battery manufacturing discharges, coil coating discharges, copper forming discharges and metal molding and castings discharges, if any of the following substances are present in a discharge at concentrations higher than the limitations allowed in subparagraph (2) of this subsection prior to mixing with other categories of discharge, the listed treatment technology is required:

(A) Cyanide. Complete destruction beyond the cyanate form prior to mixing with non-cyanide wastewaters. If by alkaline chlorination, two-stage destruction is required.

(B) Hexavalent Chromium. Complete reduction to the trivalent form prior to mixing with non-hexavent chromium bearing wastewaters.

(C) Metals. Pretreatment for chelating agents, neutralization, flocculation/coagulation, and clarification and/or filtration with sludge dewatering and/or removal as necessary.

(2) For process wastewater discharges from the categories listed in subdivision (s) (1), the following effluent limitations shall apply:

Parameter	Allowable Effluent Concentrations mg/*l* (1)(4)		
	Average Monthly	*Maximum Daily*	*Maximum Instantaneous (2)*
Aluminum (4)	2.0	4.0	6.0
Barium	2.0	4.0	6.0
Cadmium	0.1 (0.07)	0.5 (0.11)	0.75
Chromium, Hexavalent (3)	0.1	0.2	0.3
Chromium, Total	1.0	2.0	3.0
Copper	1.0	2.0	3.0
Cyanide, Amenable (3)	0.1	0.2	0.3
Cyanide, Total	0.65	1.2	–
Fluoride	20.0	30	45.0
Gold	0.1	0.5	0.75
Iron (4)	3.0	5.0	7.5
Lead	0.1	0.5	0.75
Nickel	1.0	2.0	3.0
Silver	0.1	0.5	0.75
Tin	2.0	4.0	6.0
Zinc	1.0	2.0	3.0
Total Suspended Solids (4)	20.0	30.0	45.0
Oil and Grease (4)	10.0	–	20.0

(1) All values are for new and existing discharges except for cadmium, in which case the numbers in parentheses are for new discharges only.

(2) As determined by a grab sample.

(3) All values are for the effluent from the treatment system prior to mixing with any other wastewaters or discharges, except that the commissioner may apply the limitations for hexavalent chromium and/or amenable cyanide at the discharges from the chromium reduction and cyanide destruction systems, respectively, if in his or her opinion the flow from such system is too low in relation to the total flow from the treatment system to allow a meaningful or accurate measurement at the final discharge. Such alternate limitations shall not result in greater quantities of these substances being discharged than those which would be discharged if the limitations specified above were applied at the effluent from the treatment system.

(4) These limitations apply only to NPDES permits.

(3) The following minimum levels of treatment apply to the corresponding categories of discharge, subject to the approval of the commissioner. The commissioner may require additional treatment on a case-by-case basis.

(A) For minor photographic processing wastewaters, silver recovery.

(B) For groundwater contamination recovery system wastewaters from oil recovery operations, gravity separation and skimming of floatable materials in a tank with a retention time of at least six hours and, for groundwater contamination recovery system wastewaters from gasoline recovery operations, aeration or carbon adsorption. For receiving waters designated in the ''Connecticut Water Quality Standards and Classifications'' as a goal of AA or A, the total volatile hydrocarbon concentration of the discharge shall not be greater than ten parts per billion at any time.

(C) For vehicle service drains and vehicle washing facilities, gravity separation and skimming in a tank with a capacity of 1000 gallons or a retention time of at least twenty four hours at the average daily flow, whichever is greater.

(D) For minor tumbling and cleaning of parts wastewaters, gravity separation in a tank with a retention time of at least twenty four hours at average daily flow.

(E) For furniture refinishing rinsewaters, neutralization if acids are used in the process, and solids removal by gravity separation or filtration.

(F) For transfer station floor drains, gravity separation and skimming of floatable materials.

(G) For incinerator scrubber wastewaters, neutralization to a pH of between 6.0 and 10.0, and gravity settling.

(H) For carpet and upholstery cleaners, removal of lint through filtration.

(t) **Discharges to POTWs—prohibitions**

(1) For discharges to POTWs, no discharge may for any reason cause or threaten, either singly or in combination with other discharges:

(A) Interference with or adverse effect upon the operation of the POTW.

(B) Interference with or adverse effect upon the POTW's sludge handling, use or disposal, including but not limited to noncompliance with section 405 CWA, the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, the Marine Protection Act or any local or state laws, regulations or ordinances.

(C) The POTW to exceed its influent design loading parameters.

(D) The POTW to violate its permit, including but not limited to exceeding its permit limits.

(E) A worsening of any condition which is causing the POTW to exceed its influent design loading parameters or violate its permit.

(F) Pass through any substance into the receiving waters which then causes or threatens pollution.

(2) No discharge to a POTW may contain:

(A) Any substance which causes or threatens a fire or explosion hazard in the POTW.

(B) Any substance which causes or threatens corrosive structural damage to the POTW. In no case shall a substance with a pH less than 5.0 be discharged unless the POTW is specifically designed to accommodate such a discharge.

(C) Solid or viscous wastes in amounts which cause or threaten obstruction to flow in the sewers.

(D) Heat in such amounts that the temperature of the POTW influent exceeds 104°F, unless the POTW is designed to accommodate such heat.

Appendix A

Primary Industry Categories
Adhesives and sealants[2]
Aluminum forming[1]
Auto and other laundries[2]
Battery manufacturing[1]
Coal mining[1]
Coil coating[1]
Copper forming[1]
Electrical and electronic components[1]
Electroplating[1]
Explosives manufacturing[3]
Foundries[1]
Gum and wood chemicals[3]
Inorganic chemicals manufacturing[1]
Iron and steel manufacturing[1]
Leather tanning and finishing[1]
Mechanical products manufacturing[1]
Nonferrous metals manufacturing[1]
Ore mining[1]
Organic chemicals manufacturing[1]
Paint and ink formulation[3]
Pesticides[1]
Petroleum refining[1]
Pharmaceutical preparations[1]
Photographic equipment and supplies[3]
Plastics processing[1]
Plastic and synthetic materials manufacturing[1]
Porcelain enameling[1]
Printing and publishing[3]
Pulp and paper mills[1]
Rubber processing[3]
Soap and detergent manufacturing[3]
Steam electric power plants[1]
Textile mills[1]
Timber products processing[1]

[1] Means wastewaters from this source, as defined pursuant to section 301 of the 1972 federal Water Pollution Control Act 33 U.S.C. 1251 et seq.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget.

[3] Defined in section 22a-430-6 (b) of the Regulations of Connecticut State Agencies.

Appendix B

Table I—Testing Requirements for Organic Toxic Substances by Primary Industry Category for Existing Discharges

	GC/MS Fraction[4]			
Industrial category	*Volatile*	*Acid*	*abBase/ neutral*	*Pesticide*
Adhesives and Sealants[2]	*	*	*	
Aluminum Forming[1]	*	*	*	
Auto and Other Laundries[2]	*	*	*	*
Battery Manufacturing[1]				
Coal Mining[1]	*	*	*	*
Coil Coating[1]	*	*	*	
Copper Forming[1]	*	*	*	
Electric and Electronic Components[1]	*	*	*	*
Electroplating[1]	*	*	*	
Explosives Manufacturing[3]		*	*	
Foundries[1]	*	*	*	
Gum and Wood Chemicals[3]				
(except the following)	*	*		
Gum & Wood—	*	*	*	
Tall Oil Rosin			*	
Gum & Wood—	*	*		
Rosin based derivatives			*	
Inorganic Chemicals Manufacturing[1]	*	*		
Iron and Steel Manufacturing[1]	*	*	*	
Leather Tanning and Finishing[1]	*	*	*	
Mechanical Products Manufacturing[1]	*	*	*	
Nonferrous Metals Manufacturing[1]	*	*	*	*
Ore Mining[1]—base and precious metals		*		
Organic Chemicals Manufacturing[1]	*	*	*	*
Paint and Ink Formulation[3]	*	*	*	
Pesticides[1]	*	*	*	*
Petroleum Refining[1]	*			
Pharmaceutical Preparations[1]	*	*	*	
Photographic Equipment and Supplies[3]	*	*	*	
Plastic and Synthetic Materials			*	
Manufacturing[1]	*	*		*
Plastic Processing[1]	*			
Porcelain Enameling[1]			*	
Printing and Publishing[3]	*	*		*
Pulp and Paper Mills[1]	*	*	*	*
Rubber Processing[3]	*	*	*	
Soap and Detergent Manufacturing[3]	*	*	*	
Steam Electric Power Plants[1]	*	*		
Textile Mills[1]—except Griege mills	*	*	*	
Timber Products Processing[1]	*	*	*	*

[1] Means wastewaters from this source, as defined pursuant to section 301 of the 1972 federal Water Pollution Control Act 33 U.S.C. 1251 et seq.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget.

[3] Defined in section 22a-430-6 (b) of the Regulations of Connecticut State Agencies.

[4] The toxic pollutants in each fraction are listed in Table II.

* Testing required.

Table II—Organic Toxic Substances in Each of Four Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GS/MS)

Volatiles

1 acrolein
2 acrylonitrile
3 benzene
5 bromoform
6 carbon tetrachloride
7 chlorobenzene
8 chlorodibromomethane
9 chloroethane
10 2-chloroethylvinyl ether
11 chloroform
12 dichlorobromomethane
14 1, 1-dichloroethane
15 1, 2-dichloroethane
16 1, 1-dichloroethylene
17 1, 2-dichloropropane
18 1, 2-dichloropropylene
19 ethylbenzene
20 methylbromide
21 methylchloride
22 methylene chloride
23 1, 1, 2, 2-tetrachloroethane
24 tetrachloroethylene
25 toluene
26 1, 2-trans-dichloroethylene
27 1, 1, 1-trichloroethane
28 1, 1, 2-trichloroethane
29 trichloroethylene
31 vinyl chloride

Acid Compounds

1 2-chlorophenol
2 2, 4-dichlorophenol
3 2, 4-dimethylphenol
4 4, 6-dinitro-o-cresol
5 2, 4-dinitrophenol
6 2-nitrophenol
7 4-nitrophenol
8 p-chloro-m-cresol
9 pentachlorophenol
10 phenol
11 2, 4, 6-trichlorophenol

Base/Neutral

1 acenaphthene
2 acenaphthylene
3 anthracene

4 benzidine
5 benzo(a)anthracene
6 benzo(a)pyrene
7 3, 4-benzofluoranthene
8 benzo(ghi)perylene
9 benzo(k)fluoranthene
10 bis(2-chloroethoxy)methane
11 bis(2-chloroethyl)ether
12 bis(2-chloroisopropyl)ether
13 bis(2-ethylhexyl)phthalate
14 4-bromophenylphenyl ether
15 butylbenzyl phthalate
16 2-chloronaphthalene
17 4-chlorophenyl phenyl ether
18 chrysene
19 dibenzo(a,H)anthracene
20 1, 2-dichlorobenzene
21 1, 3-dichlorobenzene
22 1, 4-dichlorobenzene
23 3, 3-dichlorobenzidine
24 diethyl phthalate
25 dimethyl phthalate
26 di-n-butyl phthalate
27 2, 4-dinitrotoluene
28 2, 6-dinitrotoluene
29 di-n-octyl phthalate
30 1, 2-diphenylhydrazine (as azobenzene)
31 fluroranthene
32 fluorene
33 hexachlorobenzene
34 hexachlorobutadiene
35 hexachlorocyclopentadiene
36 hexachloroethane
37 indeno(1, 2, 3-cd)pyrene
38 isophorone
39 napthalene
40 nitrobenzene
41 N-nitrosodimethylamine
42 N-nitrosodi-n-propylamine
43 N-nitrosodiphenylamine
44 phenanthrene
45 pyrene
46 1, 24-trichlorobenzene

Pesticides

1 aldrin
2 alpha-BHC
3 beta-BHC
4 gamma-BHC
5 delta-BHC

6 chlordane
7 4, 4-DDT
8 4, 4-DDE
9 4, 4-DDD
10 dieldrin
11 alpha-endosulfan
12 beta-endosulfan
13 endosulfan sulfate
14 endrin
15 endrin aldehyde
16 heptachlor
17 heptachlor epoxide
18 PCB-1242
19 PCB-1254
20 PCB-1221
21 PCB-1232
22 PCB-1248
23 1260
24 PCB-1016
25 toxaphene

Appendix B

Table III—Other Toxic Substances: Metals, Cyanide, and Total Phenols

1 Antimony, Total
2 Arsenic, Total
3 Beryllium, Total
4 Cadmium, Total
5 Chromium, Total
6 Chromium, Hexavalent
7 Copper, Total
8 Lead, Total
9 Mercury, Total
10 Nickel, Total
11 Selenium, Total
12 Silver, Total
13 Thallium, Total
14 Zinc, Total
15 Cyanide, Total
16 Cyanide, Amenable
17 Phenols, Total

Table IV—Other Substances

1 Bromide
2 Chlorine, Total Residual
3 Color
4 Fecal Coliform
5 Fluoride
6 Nitrate-Nitrite
7 Nitrogen, Total Organic

8 Radioactivity
9 Sulfate
10 Sulfide
11 Sulfite
12 Surfactants
13 Aluminum, Total
14 Barium, Total
15 Boron, Total
16 Cobalt, Total
17 Iron, Total
18 Magnesium, Total
19 Molybdenum, Total
20 Manganese, Total
21 Tin, Total
22 Titanium, Total

Table V—Other Toxic Substances and Hazardous Substances

Toxic Substances

1 Asbestos

Hazardous Substances

1 Acetaldehyde
2 Allyl alcohol
3 Allyl chloride
4 Amyl acetate
5 Aniline
6 Benzonitrile
7 Benzyl chloride
8 Benzyl chloride
9 Butyl acetate
10 Butylamine
11 Captan
12 Carbaryl
13 Carbofuran
14 Carbon disulfide
15 Chlorpyrifos
16 Coumaphos
17 Cresol
18 Crotonaldehyde
19 Cyclohexane
20 2, 4-Dichlorophenoxy (acetic acid)
21 Diazinon
22 Dicamba
23 Dichlobenil
24 Dichlone
25 2, 2-Dichloropropionic acid
26 Dichlorvos
27 Diethyl amine
28 Dimethyl amine

29 Dintrobenzene
30 Diquat
31 Disulfoton
32 Diuron
33 Epichlorohydrin
34 Ethanolamine
35 Ethion
36 Ethylene diamine
37 Ethylene dibromide
38 Formaldehyde
39 Furfural
40 Guthion
41 Isoprene
42 Isopropanolamine
43 Kelthane
44 Kepone
45 Malathion
46 Mercaptodimethur
47 Methoxychlor
48 Methyl mercaptan
49 Methyl methacrylate
50 Methyl parathion
51 Mevinphos
52 Mexacarbate
53 Monoethyl amine
54 Monomethyl amine
55 Naled
56 Napthenic acid
57 Nitrotoluene
58 Parathion
59 Phenolsulfanate
60 Phosgene
61 Propargite
62 Propylene oxide
63 Pyrethrins
64 Quinoline
65 Resorcinol
66 Strontium
67 Strychnine
68 Styrene
69 2, 4, 5-T(2, 4, 5-Trichlorophenoxy acetic acid)
70 TDE(Tetrachlorodiphenylethane)
71 2, 4, 5-TP
72 Trichlorofan
73 Triethylamine
74 Trimethylamine
75 Uranium
76 Vanadium
77 Vinyl acetate
78 Xylene

79 Xylenol
80 Zirconium

Appendix C

Conventional Pollutants

1. Biochemical Oxygen Demand (BOD) — Five Day
2. Total Suspended Solids (TSS) — Nonfilterable
3. pH
4. Oil and Grease
5. Fecal Coliform

Appendix D

Other Toxic Substances

1 Acenaphthene
2 Acrolein
3 Acrylonitrile
4 Aldrin/Dieldrin
5 Antimony and compounds*
6 Arsenic and compounds
7 Asbestos
8 Benzene
9 Benzidine
10 Beryllium and compounds
11 Cadmium and compounds
12 Carbon tetrachloride
13 Chlordane (technical mixture and metabolites)
14 Chlorinated benzenes (other than dichlorobenzenes)
15 Chlorinated ethanes (including 1, 2-dichloroethane, 1, 1, 1-trichlorethane, and hexachloroethane)
16 Chloroalkyl ethers (chloromethyl, chloroethyl, and mixed ethers)
17 Chlorinated naphthalene
18 Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols)
19 Chloroform
20 2-chlorophenol
21 Chromium and compounds
22 Copper and compounds
23 Cyanides
24 DDT and metabolites
25 Dichlorobenzenes (1, 2-1, 3-, and 1, 4-dichlorobenzenes)
26 Dichlorobenzidine
27 Dichloroethylenes (1, 1-and 1, 2-dichloroethylene)
28 2, 4-dichlorophenol
29 Dichloropropane and dichloropropene
30 2, 4-dimethylphenol
31 Dinitrotoluene
32 Diphenylhydrazine
33 Endosulfan and metabolites
34 Endrin and metabolites

35 Ethylbenzene
36 Fluoranthen
37 Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ethers, bromophenylphenyl ether, bis(dischloroisopropyl) ether, bis-(chloroethoxy) methane and polychlorinated diphenyl ethers)
38 Halomethanes (other than those listed elsewhere; includes methylene chloride, methylchloride, methylbromide, bromoform, dichlorobromomethane, trichlorofluoromethane, dichlorodifluoromethane)
39 Heptachlor and metabolites
40 Hexachlorobutadiene
41 Hexachlorocyclohexane (all isomers)
42 Hexachlorocyclopentadiene
43 Isophorone
44 Lead and compounds
45 Mercury and compounds
46 Naphthalene
47 Nickel and compounds
48 Nitrobenzene
49 Nitrophenols (Including 2, 4-dinitrophenol, dinitrocresol)
50 Nitrosamines
51 Pentachlorophenol
52 Phenol
53 Phthalate esters
54 Polychlorinated biphenyls (PCBs)
55 Polynuclear aromatic hydrocarbons (including benzanthracenes, benzopyrenes, benzofluoranthene, chrysenes, dibenzanthracenes, and indenopyrenes)
56 Selenium and compounds
57 Silver and compounds
58 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin (TCDD)
59 Tetrachloroethylene
60 Thallium and compounds
61 Toluene
62 Toxaphene
63 Trichloroethylene
64 Vinyl chloride
65 Zinc and compounds

* The term ''compounds'' shall include organic and inorganic compounds.

(Effective July 13, 1993)

Sec. 22a-430-5. Reserved

Sec. 22a-430-6. Application fees for water pollution control permits

(a) **Authority.** This section is adopted under the authority of subdivision (a) (10) of Section 22a-6 of the Connecticut General Statutes and Section 22a-430 of the Connecticut General Statutes.

(b) **Definitions.**

(1) As used in this section:

''Agricultural Activities'' — means:

(A) Agricultural operations generating more than 1,000 gallons per day of wastewater, or

(B) Animal feeding operations with more than the following number of animals on-site:

300 slaughter or feeder cattle;
200 mature dairy cattle;
750 swine;
150 horses;
3,000 sheep or lambs;
16,500 turkeys;
30,000 laying hens or broilers;
1,500 ducks; or
250 veal calves.

''Applicant'' — means the person or municipality applying for the issuance, reissuance, modification or transfer of an individual permit under Section 22a-430 of the Connecticut General Statutes or registering for a general permit under Section 22a-430b of the Connecticut General Statutes.

''Application'' — means completed forms prescribed by the Commissioner for applying for issuance, reissuance, modification or transfer of an individual permit under Section 22a-430 of the Connecticut General Statutes or registering for a general permit under Section 22a-430b of the Connecticut General Statutes, including any additions, revisions, or modifications thereto.

''Bakery and Confectionary Wastewaters'' — means wastewaters generated by the manufacturing of candy or baked goods.

''Beverage Wastewaters'' — means wastewaters generated by the manufacturing or processing of malt beverages, malt, wines, brandy, brandy spirits, distilled liquors, rectified liquors, blended liquors, soft drinks, carbonated waters, flavoring extracts, flavoring syrups, or juices.

''Blowdown from Heating and Cooling Equipment'' — means wastewaters generated by heating and cooling equipment that recycles water.

''Building Floor Drain Wastewaters'' — means wastewaters generated from periodic washdown of floors.

''Car Wash Wastewaters'' — means wastewaters generated by the washing of cars.

''Clay, Gypsum, Refractory, and Ceramic Product Wastewaters'' — means wastewaters generated by the manufacturing of products composed wholly or chiefly of clay, gypsum, refractory or ceramic material.

''Coal Gasification Wastewaters'' — means wastewaters generated by the gasification of coal.

''Coal Liquefaction Wastewaters'' — means wastewaters generated by the liquefaction of coal.

''Concrete Product Wastewaters'' — means wastewaters generated by the manufacturing of concrete products from a combination of cement and aggregate.

''Cooling Water (Non-Contact)'' — means wastewater which has been used for cooling purposes which does not come into direct contact with a product or process.

''Department'' — means the Department of Environmental Protection.

''Dredging'' — means the removal of submerged materials by hydraulic or mechanical means from the waters of the state.

''Edible Oils Wastewaters'' — means wastewaters generated by the manufacturing of edible oils.

''Explosives Manufacturing Wastewaters'' — means wastewaters generated by the manufacturing of explosives, ammunition for arms, and fireworks.

''Fish Hatchery and Farm Wastewaters'' — means wastewaters generated by the breeding and/or raising of fish or other aquatic organisms.

''Furniture Manufacturing Wastewaters'' — means wastewaters generated by the manufacturing of furniture for industrial, commercial, or residential purposes.

''Groundwater Contamination Recovery System'' — means a system generating a discharge from the clean-up or renovation of contaminated groundwater.

''Gum and Wood Chemical Wastewaters'' — means wastewaters generated by the manufacturing of gum or wood chemical products.

''Hazardous Waste'' — means any waste material which may pose a present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed including hazardous waste identified in accordance with Section 3001 of the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 et seq.), as amended.

''Hazardous Waste Treatment Facility'' — means any facility engaged primarily in the treatment, as defined in Section 22a-449(c)-100 of the Regulations of Connecticut State Agencies, of hazardous waste.

''Hydrostatic Pressure Testing Wastewater'' — means waters used to test the structural integrity of new tanks or pipelines, and tanks and pipelines which have been used to hold or transfer drinking water, sewage, or natural gas.

''Incinerator'' — means any facility engaged primarily in the incineration of solid waste which is not hazardous waste.

''Issuance'' — means the date on which a notice or other document from the Commissioner is deposited in the mail or personally delivered, whichever is earlier.

''Minor Tumbling and Cleaning of Parts Wastewaters'' — means wastewaters generated by processing of only aluminum, titanium, magnesium, uncoated or unplated steel or stainless steel, or non-metallic parts, or any combination thereof, for the removal of particulate metal, for surface texturing, or for cleaning, where no acids or cyanides are used or present in the processing.

''Miscellaneous Food Product Wastewaters'' — means wastewaters generated by the production of food products which are not included in other categories of Schedule A of this section.

''Month'' — means any consecutive thirty-day period.

''Non-Hazardous Waste Treatment Facility'' — means any facility engaged primarily in the treatment, as defined in this section, of waste which is not hazardous waste.

''On-site'' — means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right(s)-of-way. Non-contiguous properties owned by the same person or municipality but connected by a right-of-way which the person or municipality controls and to which the public does not have access, is also considered on-site property.

''Paint and Ink Formulation Wastewaters'' — means wastewaters generated by the manufacturing of paint or ink.

''Permit'' — means any permit to discharge to the waters of the State of Connecticut issued by the Commissioner of Environmental Protection pursuant to Section 22a-430 or 22a-430b of the Connecticut General Statutes, as amended.

''Photographic Equipment, Supplies Wastewaters'' — means wastewaters generated by the manufacturing of photographic equipment or supplies.

''Photographic Processing Wastewaters'' — means wastewaters generated by the processing of photographic film.

''Printing and Publishing Wastewaters'' — means wastewaters generated by the printing and publishing of paper-based materials.

''Rubber Processing Wastewaters'' — means wastewaters generated by the manufacturing of intermediate or final products from natural or synthetic rubber.

''Sanitary Sewage'' — means wastewaters discharged from a publicly owned treatment works (POTW) or any other domestic sewage treatment facility.

''Septage'' — means any wastewater or material withdrawn from a septic tank which is used to treat sanitary sewage.

''Septage Disposal Area'' — means a location utilized for ultimate land disposal of septage.

''Shale Oil Wastewaters'' — means wastewaters generated by the recovery of oil from shale deposits.

''Shipbuilding Wastewaters'' — means wastewaters generated by the building, preparing, conversion or alteration of all types of boats, ships, barges, and lighters.

''Shore Recepter and Bulk Terminal Wastewaters'' — means wastewaters generated by the loading, unloading, or storage of oil or petroleum products from all types of boats, ships, barges and lighters.

''Soap, Detergent and Cosmetic Manufacturing Wastewaters'' — means wastewaters generated by the manufacturing of either intermediate or final soap, detergent or cosmetic products.

''Stormwater'' — means wastewater consisting of precipitation runoff.

''Swimming Pool Backwash'' — means wastewaters generated from the backwashing of swimming pool filters.

''Transportation Wastewaters'' — means wastewaters generated by the manufacturing of equipment for transportation of passengers or cargo by land, air, or water.

''Treatment'' — means any method, technique, or process designed to change the physical, chemical, or biological character or composition of any waste or of a wastewater discharge.

''Tumbling and Cleaning of Parts Wastewaters'' — means wastewaters generated by the processing of parts for the removal of particulate metal, for surface texturing or for cleaning.

''Water Production Wastewaters'' — means wastewaters generated by the treatment of raw water for potable, industrial process, or commercial process use.

(2) The definitions of the following terms used in this section shall be the same as the definitions in Section 22a-430-3 of the Regulations of Connecticut State Agencies, as amended: Maximum Daily Flow; Connecticut Water Quality Standards; Domestic Sewage; Groundwaters; Publicly Owned Treatment Works (POTW); Surface Waters; Vehicle Service Floor Drain Wastewater; Minor Photographic Processing Wastewaters; Design Flow Rate.

(3) The definitions of the following terms used in this section shall be the same as the definitions in Section 22a-207 of the Connecticut General Statutes, as amended: Municipal Solid Waste; Solid Waste; Solid Waste Disposal Area; Transfer Station; Composting.

(4) The definition of the following term used in this section shall be the same as the definition in Section 22a-449-100 of the Regulations of Connecticut State Agencies, as amended: Disposal Facility.

(c) **Method of payment.** All fees required by this section, including, but not limited to, any annual fees required by Section 22a-430-7 of the Regulations of

Connecticut State Agencies, to be submitted simultaneously with a permit application, shall be paid by certified check or money order payable to the Department of Environmental Protection. The certified check or money order shall state on its face, ''Water Management Permit Application Fee.''

(d) **Application fees for new or reissued permits.**

(1) Each applicant for a new or reissued permit shall pay (A) an application fee equal to the sum of the application fees for each category of discharge proposed in the application, as determined in accordance with Schedule A of this section, and (B) an annual fee as required by Section 22a-430-7 of the Regulations of Connecticut State Agencies.

(2) The applicant shall pay $700.00 simultaneously with submission of the permit application. The applicant shall pay the balance of all fees due, including, but not limited to, the application fee required by this section, the annual fee required by Section 22a-430-7 of the Regulations of Connecticut State Agencies, any fee increases pursuant to subsection (n) of this section and all applicable late fees, within the time specified in any notice from the Commissioner of the balance due. If no time is specified, the applicant shall pay the balance due within thirty days of the date such notice is issued.

(3) The Commissioner, upon consideration of all factors which he or she deems relevant to the amount of time needed to act on the particular application, may reduce the amount of the application fee for reissuance of a particular permit to no less than 75% of the fee established in schedule A of this section if both of the following conditions are met:

(A) The applicant, as part of the application for permit reissuance, demonstrates to the Commissioner's satisfaction that no significant changes have occurred or will occur between the date the prior permit was issued and the date of reissuance of the permit that would indicate that the permit fee should be lowered. Such changes may include but are not limited to changes to the facility or any discharge which are not required by statute or regulation, and changes to the facility, any discharge or the permit which are required by statute or regulation or which the Commissioner deems necessary in order to protect the waters of the state from pollution.

(B) The application includes the following certification signed by the applicant:

''I hereby certify, as part of this application for reissuance of Permit No. __, and based on my inquiry of the person or persons responsible for operating the facility described in this application, that (1) this application does not include any new or increased discharges other than those authorized by said permit or another valid permit issued by the Commissioner under Section 22a-430 of the General Statutes, (2) since the date of said permit, no unpermitted discharges have been initiated, created, originated or maintained at the facility and (3) since the date of said permit, no new substances have been added to any discharge at the facility, and no changes have been made to the facility, that would constitute a new source or require a new or modified permit under Section 22a-430 of the General Statutes, other than new discharges and changes which were authorized by a new or modified permit. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements, and that a permit may be revoked for reasons including, but not limited to, an applicant's failure to disclose all relevant facts, or misrepresentation of any relevant facts at any time.''

(e) **Modification fees.**

(1) The fee for modification of a permit shall be as follows:

(A) for correction of typographical errors - no fee.

(B) for extension of interim or final compliance dates due to an error or unreasonable delay of the Commissioner - no fee.

(C) Except as allowed under subparagraph (1) (E) of this subsection, for a modification resulting from a change required by state or federal statute, regulation, permit, order or the Connecticut Water Quality Standards, the fee shall be one-half the permit application fee specified in subsection (d) of this section, or $500.00, whichever is greater.

(D) Except as allowed under subparagraph (1) (E) of this subsection, for a modification to reflect the discharge of any new water, substance or material or any increase in any water, substance or material beyond existing permit conditions, the fee shall be the permit application fee and annual fee specified in subsection (d) of this section as if the new or increased discharge were the subject of an application for a new permit.

(E) If the Commissioner determines that a modification under subparagraphs (1) (C) or (1) (D) of this subsection requires no more staff resources in a particular case than the staff resources generally required for minor modifications under Section 22a-430-4 (p) (5) (B) of the Regulations of Connecticut State Agencies, the fee shall be $500.00.

(F) For all other modifications to permits the fee shall be $500.00.

(2) Any person or municipality applying for a permit modification shall pay the entire permit modification fee simultaneously with submission of the application. For a permit modification for which no application is submitted, the entire permit modification fee shall be paid on or before thirty (30) days after the issuance of notice from the Commissioner that it is due.

(f) **Discharge category.** If the Commissioner upon review determines that an applicant's categorization of a discharge for purposes of calculating a fee or the applicant's calculation of a fee is incorrect, the Commissioner shall notify the applicant of his or her determination. Such determination shall be final. Should additional payment be due, the Commissioner shall not continue with review of the application until full payment is made. The Commissioner shall determine the amount of the permit application fees for any discharge category which is not listed in Schedule A, based on the reasonable cost of reviewing and acting upon a permit application for such a discharge.

(g) **Waiver.** The Commissioner may waive, reduce, or allow delayed payment of all or part of a fee in cases in which he or she determines that the amount of the fee is clearly excessive in relation to the cost of the permitted activity.

(h) **Transfer fee.** The fee for transfer of a permit or application shall be $500.00. A permit shall not be transferred prior to payment of all required fees and the approval of the transfer by the Commissioner, as required by Section 22a-430-4 of the Regulations of Connecticut State Agencies. No applicant shall be required to pay both a transfer fee and a permit modification fee for the sole purpose of obtaining a permit transfer.

(i) **Payment of new fee.** The Commissioner may at his or her discretion require submission of a new permit application and payment of a new application fee, regardless of any fees previously paid or required, whenever the Commissioner acts under Section 22a-430-4 (k) (5) of the Regulations of Connecticut State Agencies and under the following conditions:

(1) An application has been determined by the Commissioner to be complete and, at the applicant's request, no further action is taken by the Commissioner for

more than one hundred and eighty (180) days from the date the application is determined to be complete.

(2) An application is determined by the Commissioner to be incomplete and more than one hundred eighty (180) days have elapsed since the Commissioner's most recent request to the applicant or his or her agent for additional information and the applicant has not submitted such information.

(j) **Prohibition of review.** The Commissioner shall not review an application for an individual permit under Section 22a-430 of the Connecticut General Statutes, including, but not limited to, an application for a new, reissued, modified or transferred permit, and shall not issue any such permit, unless all fees required by this section and Section 22a-430-7 of the Regulations of Connecticut State Agencies have been paid in full. Unless the Commissioner specifies otherwise in writing, a registration for a general permit under Section 22a-430b of the Connecticut General Statutes shall not be deemed complete and coverage under the general permit shall not begin unless all fees required by this section have been paid in full.

(k) **Late fee.** (1) A late fee of twenty-five percent of the application fee and the annual fee required by this section shall be charged, in addition to any other fee required by this section, if (A) the applicant fails to submit a complete application for reissuance on or before the required due date, if any; or (B) the applicant begins the activity to be permitted prior to applying for the required permit. The applicant or permittee shall pay an additional five percent of the amount of the application fee and the annual fee required by this section for each month or part thereof beyond the date on which a new or reissued permit was required during which a complete application is not on file with the Commissioner.

(2) An applicant or permittee who fails to pay any required fee when due shall pay an additional five percent of the amount of such fee for each month or part thereof that such fee is overdue.

(3) This subsection shall not prevent the Commissioner from pursuing other remedies available by statute or regulation.

(*l*) **Exemption.** Discharges from a building used solely as a single-family residence or from a swimming pool at a single family residence shall be exempt from all fee requirements under this section.

(m) **Municipal fees.**

(1) As required by Section 22a-6 (b) of the Connecticut General Statutes, any fee charged to a municipality pursuant to this section shall be fifty percent of the fee that would be charged to other applicants or permittees.

(2) As required by Section 22a-6 (c) of the Connecticut General Statutes, for municipalities that own more than one POTW, the fee for a permit application for each such POTW is either (A) determined by dividing the fee in schedule A for the sum of the average daily flow proposed in the application plus the permitted average daily flows for all other municipally owned POTWs, by the total number of municipally owned POTWs, or (B) fifty percent of the fee that would be charged to other applicants or permittees for a discharge of sanitary sewage in the amount proposed in the application, whichever is less.

(n) **Fee increases.** If any change is made in an application which would result in an increase in the fee, or if the fee for permit issuance, reissuance, modification or transfer under this section or the annual fee under Section 22a-430-7 of the Regulations of Connecticut State Agencies increases before (1) a final determination of the Commissioner, or (2) approval of plans and specifications under Section 22a-430-4 (k) of the Regulations of Connecticut State Agencies, whichever is later, the

applicant shall pay the amount of such increase. Such payment shall be made (1) on or before thirty (30) days after issuance of notice from the Commissioner of the fee increase, or (2) before the permit is issued, whichever is earlier. The provisions of this subsection shall not apply to applications which were received by the Commissioner prior to July 1, 1993 and which, by that date, included all required fees and all information required by statute, regulation or prior request of the Commissioner.

(o) **Credits and refunds.**

(1) If the Commissioner determines that a permit under Section 22a-430 or Section 22a-430b of the Connecticut General Statutes is not required for the activity or a portion of the activity described in a permit application, or if any change is made to an application which would result in a decrease in the fee, and neither the public notice nor a final decision on the application has been issued, the Commissioner shall retain one half of all application fees due to date for the subject application, and shall credit to the applicant the balance of any application and annual fees paid, to be applied to future fees due to the Commissioner under a statute or regulation administered by him or her. If the Commissioner denies a permit, he or she shall credit to the applicant any annual fee paid, to be applied to future fees due to the Commissioner under a statute or regulation administered by him or her.

(2) If an application fee and an annual fee are submitted for an individual permit under Section 22a-430 of the Connecticut General Statutes, and the Commissioner determines (A) that the discharge is covered in accordance with the terms, including any registration requirements, of a general permit issued under Section 22a-430b of the Connecticut General Statutes, and (B) that the fee for such general permit is less than the fee paid, the Commissioner shall deduct the general permit fee from the fees paid and credit the remainder to the applicant to be applied to future fees due to the Commissioner under a statute or regulation administered by him or her.

(3) If, immediately prior to permit issuance, the total paid by the applicant is more than the sum of all required fees, including late fees, required under this section and Section 22a-430-7 of the Regulations of Connecticut State Agencies, the Commissioner shall credit the excess payment to the applicant to be applied to future fees due to the Commissioner under a statute or regulation administered by him or her.

(4) Modification and transfer fees shall be non-refundable, except that modification fees specified in subparagraphs (C) and (D) of subdivision (1) of subsection (e) of this section shall be subject to the credit and refund provisions of this subsection.

(5) If the Commissioner issues or intends to issue a credit to an applicant under this subsection and the applicant demonstrates to the Commissioner's satisfaction that no future fees can reasonably be expected to be required of the applicant, the Commissioner shall refund the excess payment to the applicant.

(6) There shall be no credits or refunds other than as specified in this subsection.

SCHEDULE A

I. Category I

Subcategory	*Application*
X	700.00
Y	4,900.00
Z	9,800.00

Wastewater Category	*Subcategory* X*	Y*	Z*
Adhesives and Sealants[2]	—	0–5,000	>5,000
Aluminum Forming[1] (Except to POTWs)	—	0–5,000	75,000
Aluminum Forming[1] (to POTWs)	—	0–10,000	>10,000
Asbestos Manufacturing[1]	—	0–5,000	>5,000
Bakery and Confectionary[3]	—	0–50,000[4]	>50,000
Battery Manufacturing[1]	—	0–5,000	>5,000
Beverage[3]	—	0–50,000[4]	>50,000
Builders Paper and Roofing Felt[1]	—	0–5,000	>5,000
Canned and Preserved Fruits Processing[1]	—	0–50,000[4]	>50,000
Canned and Preserved Seafood Processing[1]	—	0–50,000[4]	>50,000
Cement Manufacturing[1]	—	0–50,000	>50,000
Clay, Gypsum, Refractory, and Ceramic Products[3]	—	0–50,000	>50,000
Coal Gasification[3]	—	0–50,000	>50,000
Coal Liquefaction[3]	—	0–50,000	>50,000
Coal Mining[1]	—	0–50,000	>50,000
Coil Coating[1] (except to POTW)	—	0–5,000	>5,000
Coil Coating[1] (to POTWs)	—	0–10,000	>10,000
Concrete Product[3]	<10,000	10,000–50,000	>50,000
Copper Forming[1] (except to POTWs)	—	0–5,000	>5,000
Copper Forming[1] (to POTWs)	—	0–10,000	>10,000
Dairy Products Processing[1]	—	0–50,000[4]	>50,000
Dairy Products Processing[1]	—	0–50,000[4]	>50,000
Edible Oils[3]	—	0–50,000[4]	>50,000
Electrical and Electronic Components[1] (except to POTWs)	—	0–5,000	>5,000
Electrical and Electronic Components[1] (to POTWs)	—	0–10,000	>10,000
Explosives Manufacturing[3]	—	0–5,000	>5,000
Ferroalloys Manufacturing[1] (except to POTWs)	—	0–5,000	>5,000
Ferroalloys Manufacturing[1] (to POTWs)	—	0–10,000	>10,000
Fertilizer Manufacturing[1]	—	0–5,000	>5,000
Fish Hatchery & Farm[3]	—	0–1,000,000	>1,000,000
Furniture Manufacturing[3]	—	0–5,000	>5,000
Glass Manufacturing[1]	—	0–50,000	>50,000
Grain Mills[1]	—	0–50,000	>50,000
Gum and Wood Chemical[3]	—	0–5,000	>5,000
Hospitals[1]	<5,000	5,000–100,000	>100,000
Inorganic Chemicals Manufacturing[1]	—	0–5,000	>5,000
Iron and Steel Manufacturing[1]	—	0–50,000	>50,000
Laboratory Wastewaters[1]	<5,000	5,000–100,000	>100,000
Leather Tanning and Finishing[1]	—	0–50,000	>50,000
Meat Products and Rendering[1]	—	0–50,000[4]	>50,000
Metal Finishing[1] (except to POTWs)	—	0–5,000	>5,000
Metal Finishing[1] (to POTWs)	—	0–10,000	>10,000
Metal Molding and Casting[1]	—	0–50,000	>50,000
Mineral Mining and Processing[1]	—	0–50,000	>50,000
Miscellaneous Food Product[3]	—	0–50,000[4]	>50,000
Nonferrous Metals Manufacturing[1] (except to POTWs)	—	0–5,000	>5,000

Wastewater Category	*Subcategory* X*	Y*	Z*
Nonferrous Metals Manufacturing[1] (to POTWs)	—	0–10,000	>10,000
Oil and Gas Extraction[1]	—	0–50,000	>50,000
Ore Mining[1]	<100,000	100,000–1,000,000	>1,000,000
Organic Chemicals Manufacturing[1]	—	0–50,000	>50,000
Paint and Ink Formulation[3]	—	0–1,000	>1,000
Paving and Roofing Materials[1]	—	0–5,000	>5,000
Pesticides[1]	—	0–1,000	>1,000
Petroleum Refining[1]	—	0–5,000	>5,000
Pharmaceutical Preparations[1]	—	0–50,000	>50,000
Phosphate Manufacturing[1]	—	0–50,000	>50,000
Photographic Equipment, Supplies[3]	<5,000	5,000–50,000	>50,000
Photographic Processing[3]	<5,000	5,000–50,000	>50,000
Plastics Processing[1]	—	0–5,000	>5,000
Porcelain Enameling[1]	—	0–5,000	>5,000
Printing and Publishing[3]	—	0–5,000	>5,000
Pulp and Paper Mills[1]	—	0–50,000	>50,000
Rubber Processing[3]	—	0–50,000	>50,000
Shale Oil[3]	—	0–50,000	>50,000
Shipbuilding[3]	—	0–50,000	>50,000
Shore Receptor and Bulk Terminal[3]	—	0–50,000	>50,000
Soap, Detergent, and Cosmetic Manufacturing[3]	—	0–5,000	>5,000
Steam Electric Power Plants[1] (per power generating unit)	—	0–50,000	>50,000
Sugar Processing[1]	—	0–50,000	>50,000
Textile Mills[1]	—	0–50,000	>50,000
Timber Products Processing[1]	—	0–5,000	>5,000
Transportation[3]	—	0–50,000	>50,000

* These figures refer to the total maximum daily flow for each category of discharge, in gallons per day, as proposed in the permit application.

[1] Means wastewaters from this source, as defined pursuant to Section 301 of the 1972 Federal Water Pollution Control Act 33 U.S.C. 1251 et seq., as amended.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget, as amended.

[3] Defined in Section 22a-430-6 (b) of this section.

[4] For these categories, if the discharge is to a POTW and the maximum daily flow as proposed in the permit application is less than 5,000 gallons per day, the fee shall be $700.00.

> means more than

< means less than

II. Category II—Miscellaneous Discharges

Category	*Application*
1. Cooling Water (Non-Contact)[3]	
a. <5,000*	700.00
b. 5,000–100,000*	2,450.00
c. 100,001–10,000,000*	9,800.00
d. >10,000,000*	24,500.00
2. Incinerator[3]	4,200.00
3. Transfer Station[3]	875.00
4. Hazardous Waste Disposal Facilities[3]	70,000.00
5. Solid Waste Disposal Areas[3]	40,000.00
6. Water Production Wastewaters[3]	875.00
7. Agricultural Activities[3]	
a. Slaughter or feeder cattle	
1. 300-899 cattle	700.00

Category	*Application*
2. 900-1800 cattle	1,750.00
3. > 1800 cattle	2,625.00
b. Mature Dairy Cattle	
1. 200-599 cattle	700.00
2. 600-1200 cattle	1,750.00
3. > 1200 cattle	2,625.00
c. Swine	
1. 750-2500 swine	700.00
2. > 2500 swine	2,625.00
d. Horses	
1. 150-499 horses	700.00
2. 500-900 horses	1,750.00
3. > 900 horses	2,625.00
e. Sheep or Lambs	
1. 300-3899 sheep/lambs	700.00
2. 3900-9000 sheep/lambs	1,750.00
3. > 9000 sheep/lambs	2,625.00
f. Turkeys	
1. 16,000–49,499 turkeys	700.00
2. 49,500–99,000 turkeys	1,750.00
3. > 99,000 turkeys	2,625.00
g. Laying Hens or Broilers	
1. 30,000–89,999 hens/broilers	700.00
2. 90,000–180,000 hens/broilers	1,750.00
3. > 180,000 hens/broilers	2,625.00
h. Ducks	
1. 1500–4499 ducks	700.00
2. 4500–9000 ducks	1,750.00
3. > 9000 ducks	2,625.00
i. Veal Calves	
1. 250–749 calves	700.00
2. 750–1500 calves	1,750.00
3. > 1500 calves	2,625.00
8. Stormwater[3]	4,200.00
9. Groundwater Contamination Recovery Systems[3]	4,200.00
10. Hazardous Waste Treatment Facility[3]	42,000.00
11. Sanitary Sewage[3] to Surface Waters[3]	
a. < 20,000*	1,312.50
b. 20,000–999,999*	4,200.00
c. 1,000,000–4,999,999*	6,125.00
d. 5,000,000–9,999,999*	7,000.00
e. 10,000,000–20,000,000*	7,875.00
f. > 20,000,000*	8,750.00
12. Sanitary Sewage[3] to Groundwaters[3] > 5,000‡	3,150.00
13. Sanitary Sewage[3] to Sewer	1,312.50
14. Dredging[3]	3,150.00
15. Auto and other Laundries Wastewaters	
a. Power Laundries, Family and Commercial[2]	
1. 0–50,000*	700.00
2. >50,000*	1,312.50
b. Linen Supply[2]	
1. 0–50,000*	700.00
2. >50,000*	1,312.00
c. Diaper Service[2]	1,312.00
d. Coin-Operated Laundries and Dry Cleaners[2]	1,312.00
e. Dry Cleaning Plants Except Rug Cleaning[2]	1,312.50
f. Carpet and Upholstery Cleaners[2]	1,312.50

Category	*Application*
g. Industrial Laundries[2]	
1. 0–50,000*	4,900.00
2. >50,000*	9,800.00
h. Misc. Laundry and Garment Services[2]	700.00
i. Car Washes[2]	1,312.50
16. Septage Disposal Area[3]	4,375.00
17. Blowdown from Heating and Cooling Equipment[3]	2,000.00
18. Tumbling and Cleaning of Parts Wastewaters[3]	
a. 0–1,000*	2,000.00
b. 1,001–10,000*	4,900.00
c. >10,000*	9,800.00
19. Minor Tumbling and Cleaning of Parts Wastewaters[3]	
a. 0–1,000*	1,000.00
b. 1,001–10,000*	2,450.00
c. >10,000	4,900.00
20. Non-hazardous Waste Treatment Facility[3]	9,800.00
21. Hydrostatic Pressure Testing Wastewater[3]	
a. 0–50,000* (excluding natural gas pipelines)	700.00
b. >50,000* (excluding natural gas pipelines)	2,450.00
c. Natural Gas Pipelines	9,800.00
22. Composting[3]	6,300.00
23. Building Floor Drain Wastewaters	700.00
24. Swimming Pool Wastewaters	700.00

* These figures refer to the total maximum daily flow for each category of discharge, in gallons per day, as proposed in the permit application, except for POTWs owned by municipalities, in which case the flow is as described in subdivision (n) (1) of this section.

‡ These figures refer to the design flow rate, in gallons per day, as proposed in the permit application.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget, as amended.

[3] Defined in Section 22a-430-6 (b) of this section.

>means more than

<means less than

III. Category III — No application fee

1. Sanitary sewage to the groundwaters <5,000 gallons per day design flow rate.

IV. Category IV — General permits

(1) for general permits issued under Section 22a-430b of the Connecticut General Statutes, the following fees shall apply:

(A) Where no registration is required, no fee.

(B) Where registration is by notice of coverage, or where registration is required as a condition of the permit, the fee shall be $250.00 per registration.

(C) Where registration is by notice of intent to be covered, the fee shall be $500.00 per registration.

(D) If the commissioner requires any person or municipality to submit a pollution prevention plan under a general permit issued under section 22a-430b of the General Statutes, a fee of $250.00 shall be submitted simultaneously with said plan.

(Effective July 13, 1993)

Sec. 22a-430-7. Annual fees for water pollution control permits

(a) **Authority.** This section is adopted under the authority of subdivision (a) (10) of Section 22a-6 of the Connecticut General Statutes and Section 22a-430 of the Connecticut General Statutes.

(b) **Definitions:** The definitions in Section 22a-430-6 of the Regulations of Connecticut State Agencies, as amended, shall apply to this section.

(c) **Annual fee.**

(1) Each applicant or permittee shall pay an annual fee to cover the cost to the Department of monitoring compliance with permit terms and conditions and applicable state and federal statutes and regulations. Except as provided in subdivision (3) of this subsection, such fee shall be paid annually on or before each July 1. The commissioner shall not review any permit application unless all required fees have been paid in full, and a new or reissued permit shall not be issued prior to payment of all required fees.

(2) If the commissioner determines that an applicant for permit issuance or reissuance owes any past due fees or late fees, the applicant shall pay all such fees prior to issuance or reissuance of the permit.

(3) Notwithstanding any requirement in Section 22a-430-6 of the Regulations of Connecticut State Agencies to the contrary, the applicant for a new permit shall pay the first annual fee within thirty days of issuance of the permit, provided the amount of such fee shall be pro-rated based on the number of days between the date of permit issuance and the next July 1. Any permittee who was required, prior to the amendment of this section on July 13, 1993, to pay an annual fee under this section for calendar year 1993 and who has not paid such fee on or before the effective date of this amendment shall pay the fee provided by this section as amended on July 13, 1993, within thirty days of notification from the commissioner that such payment is due. All permittees shall pay the annual fee for calendar year 1994 within thirty days of notification from the commissioner that such payment is due.

(d) **Method of payment.** All fees required by this section shall be paid by certified check or money order payable to the Department of Environmental Protection and shall, except for an annual fee which is required by this section to be submitted simultaneously with a permit application, state on the face of the check or money order, ''Water Management Annual Fee.''

(e) **Calculation of fee.**

(1) The annual fee shall be the total of the annual fees specified in Schedule B of this section for each category of discharge proposed in a permit application or, if a permit has been issued, as authorized by the permit.

(2) If a modification to a permit, other than a modification under Section 22a-430-6 (e) (1) (C) or (D) of the Regulations of Connecticut State Agencies, results in an increase or decrease in the annual fee, such change in the annual fee shall be effective on the July 1 which immediately follows the issuance of the permit modification. For a modification under Section 22a-430-6 (e) (1) (C) or (D) of the Regulations of Connecticut State Agencies, any increase in the annual fee resulting from the proposed modification shall be paid on or before thirty (30) days after the issuance of notice from the Commissioner that it is due.

(f) **Discharge category.** If the Commissioner determines upon review that an applicant's or permittee's categorization of a discharge for purposes of calculating a fee or the applicant's or permittee's calculation of a fee is incorrect, the Commissioner shall notify the applicant or permittee of his determination. Such determination shall be final. Should additional payment be due it shall be submitted within thirty (30) days of the date the notice of the Commissioner's determination is issued. The Commissioner shall determine the amount of the annual fee for any discharge category which is not listed in Schedule B based on the reasonable cost to the

Department of monitoring whether the source in question is in compliance with applicable statutes, regulations and permit terms and conditions.

(g) **Waiver.** The Commissioner may waive, reduce, or allow delayed payment of all or part of a fee in cases in which he or she determines that the amount of the fee is clearly excessive in relation to the cost of the permitted activity.

(h) **Late fee.** A late fee of twenty-five percent of the annual fee shall be charged, in addition to any other fee required by this section, if an applicant or permittee fails to submit the required fee when due. The permittee shall pay an additional two percent of the amount of all fees required by this section which are overdue for each month or part thereof beyond the due date during which the fee is not paid in full. This subsection shall not prevent the Commissioner from pursuing other remedies available by statute or regulation.

(i) **Exemption.** Discharges from a building used solely as a single-family residence or from a swimming pool at a single family residence shall be exempt from all fee requirements under these regulations.

(j) **Municipal fees.**

(1) As required by Section 22a-6 (b) of the Connecticut General Statutes, any fee charged to a municipality pursuant to this section shall be fifty percent of the fee that would be charged to other applicants or permittees.

(2) As required by Section 22a-6 (c) of the Connecticut General Statutes, for municipalities that own more than one POTW, the annual fee for each such POTW is either (A) determined by dividing the fee in schedule A for the sum of the average daily flow proposed in the permit application, if any, plus the permitted average daily flows for all other municipally-owned POTWs, by the total number of municipally-owned POTWs, or (B) fifty percent of the fee that would be charged to other applicants or permittees, for the discharge of sanitary sewage at the average daily flow stated in the permit, whichever is less.

(k) **Credits and refunds.** If the total annual fee paid by an applicant or permittee is more than all required fees, including late fees, the Commissioner shall credit the excess payment to the applicant to be applied to future fees due to the Commissioner under a statute or regulation administered by him or her. If the applicant or permittee demonstrates to the Commissioner's satisfaction that no future fees can reasonably be expected to be required of the applicant or permittee, the Commissioner shall refund the excess payment to the applicant or permittee. There shall be no credits or refunds other than under this subsection.

SCHEDULE B

I. Category I

Subcategory	*Annual Fee*
X	350.00
Y	2,725.00
Z	5,450.00

	Subcategory		
Wastewater Category	*X**	*Y**	*Z**
Adhesives and Sealants[2]	—	0–5,000	>5,000
Aluminum Forming[1] (except to POTW)	—	0–5,000	>5,000
Aluminum Forming[1] (to POTW)	—	0–10,000	>10,000
Asbestos Manufacturing[1]	—	0–5,000	>5,000
Bakery and Confectionary[3]	—	0–50,000[4]	>50,000
Battery Manufacturing[1]	—	0–5,000	>5,000
Beverage[3]	—	0–50,000[4]	>50,000

Wastewater Category	*Subcategory* X*	Y*	Z*
Builders Paper and Roofing Felt[1]	—	0–5,000	>5,000
Canned and Preserved Fruits Processing[1]	—	0–50,000[4]	>50,000
Canned and Preserved Seafood Processing[1]	—	0–50,000[4]	>50,000
Cement Manufacturing[1]	—	0–50,000	>50,000
Clay, Gypsum, Refractory, and Ceramic Products[3]	—	0–50,000	>50,000
Coal Gasification[3]	—	0–50,000	>50,000
Coal Liquefaction[3]	—	0–50,000	>50,000
Coal Mining[1]	—	0–50,000	>50,000
Coil Coating[1] (except to POTW)	—	0–5,000	>5,000
Coil Coating[1] (to POTW)	—	0–10,000	>10,000
Concrete Product[3]	<10,000	10,000–50,000	>50,000
Copper Forming[1] (except to POTW)	—	0–5,000	>5,000
Copper forming[1] (to POTW)	—	0–10,000	>10,000
Dairy Products Processing[1]	—	0–50,000[4]	>50,000
Edible Oils[3]	—	0–50,000[4]	>50,000
Electrical and Electronic Components[1] (except to POTW)	—	0–5,000	>5,000
Electrical and Electronic Components[1] (to POTW)	—	0–10,000	>10,000
Explosives Manufacturing[3]	—	0–5,000	>5,000
Ferroalloys Manufacturing[1] (except to POTW)	—	0–5,000	>5,000
Ferroalloys Manufacturing[1] (to POTW)	—	0–10,000	>10,000
Fertilizer Manufacturing[1]	—	0–5,000	>5,000
Fish Hatchery & Farm[3]	—	0–1,000,000	>1,000,000
Furniture Manufacturing[3]	—	0–5,000	>5,000
Glass Manufacturing[1]	—	0–50,000	>50,000
Grain Mills[1]	—	0–50,000	>50,000
Gum and Wood Chemical[3]	—	0–5,000	>5,000
Hospitals[1]	<5,000	5,000–100,000	>100,000
Inorganic Chemicals Manufacturing[1]	—	0–5,000	>5,000
Iron and Steel Manufacturing[1]	—	0–50,000	>50,000
Laboratory Wastewaters[1]	<5,000	5,000–100,000	>100,000
Leather Tanning and Finishing[1]	—	0–50,000	>50,000
Meat Products and Rendering[1]	—	0–50,000[4]	>50,000
Metal Finishing[1] (except to POTW)	—	0–5,000	>5,000
Metal Finishing[1] (to POTW)	—	0–10,000	>10,000
Metal Molding and Casting[1]	—	0–50,000	>50,000
Mineral Mining and Processing[1]	—	0–50,000	>50,000
Miscellaneous Food Product[3]	—	0–50,000[4]	>50,000
Nonferrous Metals Manufacturing[1] (except to POTW)	—	0–5,000	>5,000
Nonferrous Metals Manufacturing[1] (to POTW)	—	0–10,000	>10,000
Oil and Gas Extraction[1]	—	0–50,000	>50,000
Ore Mining[1]	<100,000	100,000–1,000,000	>1,000,000
Organic Chemicals Manufacturing[1]	—	0–50,000	>50,000
Paint and Ink Formulation[3]	—	0–1,000	>1,000
Paving and Roofing Materials[1]	—	0–5,000	>5,000
Pesticides[1]	—	0–1,000	>1,000
Petroleum Refining[1]	—	0–5,000	>5,000
Pharmaceutical Preparations[1]	—	0–50,000	>50,000
Phosphate Manufacturing[1]	—	0–50,000	>50,000
Photographic Equipment, Supplies[3]	<5,000	5,000–50,000	>50,000
Photographic Processing[3]	<5,000	5,000–50,000	>50,000
Plastics Processing[1]	—	0–5,000	>5,000
Porcelain Enameling[1]	—	0–5,000	>5,000

Wastewater Category	*X**	*Subcategory* *Y**	*Z**
Printing and Publishing[3]	—	0–5,000	>5,000
Pulp and Paper Mills[1]	—	0–50,000	>50,000
Rubber Processing[3]	—	0–50,000	>50,000
Shale Oil[3]	—	0–50,000	>50,000
Shipbuilding[3]	—	0–50,000	>50,000
Shore Receptor and Bulk Terminal[3]	—	0–50,000	>50,000
Soap, Detergent, and Cosmetic Manufacturing[3]	—	0–5,000	>5,000
Steam Electric Power Plants[1] (per power generating unit)	—	0–50,000	>50,000
Sugar Processing[1]	—	0–50,000	>50,000
Textile Mills[1]	—	0–50,000	>50,000
Timber Products Processing[1]	—	0–5,000	>5,000
Transportation[3]	—	0–50,000	>50,000

* These figures refer to the total maximum daily flow for each category of discharge, in gallons per day, as authorized by the permit, or, if the annual fee being calculated is required to be paid simultaneously with a permit application, as proposed in the permit application.

[1] Means wastewaters from this source, as defined pursuant to Section 301 of the 1972 Federal Water Pollution Control Act 33 U.S.C. 1251 et seq., as amended.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget, as amended.

[3] Defined in Section 22a-430-6 (b) of the Regulations of Connecticut State Agencies, as amended.

[4] For these categories, if the discharge is to a POTW and the maximm daily flow (as authorized by the permit, or, if the annual fee being calculated is required to be paid simultaneously with a permit application, as proposed in the permit application) is less than 5,000 gallons per day, the fee shall be $350.00.

>means more than

<means less than

II. Category II—Miscellaneous Discharges

Category	*Annual Fee*
1. Cooling Water (Non-Contact)[3]	
a. 0–100,000*	350.00
b. 100,001–10,000,000*	1,360.00
c. >10,000,000*	5,450.00
2. Incinerator[3]	1,775.00
3. Transfer Station[3]	350.00
4. Hazardous Waste Disposal Facilities[3]	18,960.00
5. Solid Waste Disposal Areas[3]	8,900.00
6. Water Production Wastewaters[3]	350.00
7. Agricultural Activities[3]	350.00
8. Stormwater[3]	1,775.00
9. Groundwater Contamination Recovery Systems[3]	2,725.00
10. Hazardous Waste Treatment Facility[3]	16,350.00
11. Sanitary Sewage[3] to Surface Waters[3]	
a. < 20,000*	1,060.00
b. 20,000–999,999*	2,130.00
c. 1,000,000–4,999,999*	2,990.00
d. 5,000,000–9,999,999*	3,410.00
e. 10,000,000–20,000,000*	3,840.00
f. >20,000,000*	4,260.00
12. Sanitary Sewage[3] to Groundwaters[3] >5,000‡	590.00
13. Sanitary Sewage[3] to Sewer	350.00

Category	*Annual Fee*
14. Dredging[3]	2,725.00
15. Auto and other Laundries Wastewaters	
a. Power Laundries, Family and Commercial[2]	
1. 0–50,000*	350.00
2. >50,000*	1,060.00
b. Linen Supply[2]	
1. 0–50,000*	350.00
2. >50,000*	1,060.00
c. Diaper Service[2]	350.00
d. Coin-Operated Laundries and Dry Cleaners[2]	350.00
e. Dry Cleaning Plants Except Rug Cleaning[2]	1,060.00
f. Carpet and Upholstery Cleaners[2]	475.00
g. Industrial Laundries[2]	
1. 0–50,000*	2,725.00
2. >50,000*	5,450.00
h. Misc. Laundry & Garment Services[2]	350.00
i. Car Washes[2]	350.00
16. Septage Disposal Area[3]	1,775.00
17. Blowdown from Heating and Cooling Equipment[3]	2,725.00
18. Tumbling and Cleaning of Parts Wastewaters[3]	
a. 0–1,000*	1,250.00
b. 1,001–10,000*	2,725.00
c. >10,000	5,450.00
19. Minor Tumbling and Cleaning of Parts Wastewaters[3]	
a. 0–1,000*	750.00
b. 1,001–10,000*	1,360.00
c. >10,000*	2,720.00
20. Non-hazardous Waste Treatment Facility[3]	5,450.00
21. Hydrostatic Pressure Testing Wastewater[3]	
a. 0–50,000* (excluding natural gas pipelines)	350.00
b. >50,000* (excluding natural gas pipelines)	1,360.00
c. Natural Gas Pipelines	2,725.00

* These figures refer to the total maximum daily flow for each category of discharge, in gallons per day, as authorized by the permit or, if the annual fee being calculated is required to be paid prior to permit issuance or reissuance, as proposed in the permit application.

‡ These figures refer to the design flow rate, in gallons per day, as authorized by the permit or, if the annual fee being calculated is required to be paid simultaneously with a permit application, as proposed in the permit application.

[2] Means wastewaters from this source, as defined pursuant to the 1972 Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget, as amended.

[3] Defined in Section 22a-430-6 (b) of the Regulations of Connecticut State Agencies, as amended.

>means more than

<means less than

III. Category III—No Annual Fee.

1. Design flow rate as authorized by the permit, or, if the annual fee being calculated is required to be paid simultaneously with a permit application, as proposed in the permit application.

2. General permits issued under Section 22a-430b of the Connecticut General Statutes.

3. Building floor drain wastewaters.

4. Swimming pool backwash.

5. Permits issued pursuant to Section 22a-430-3 (b) (6) of the Regulations of Connecticut State Agencies, as those Regulations existed prior to the effective date of this section.

(Effective June 23, 1994)

Sec. 22a-430-8. Underground injection control

(a) **Definitions.** ''Aquifer'' means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

''Average Daily Flow'' means the average total daily flow during an operating day computed over a minimum of twenty (20) consecutive operating days.

''Commercial Subsurface Sewage Disposal System'' means a subsurface sewage disposal system receiving domestic sewage from any non-residential building or buildings on the same lot or within the same project as the building or buildings served.

''Contaminant'' means any physical, chemical, biological, or radiological substance or matter in water.

''Domestic Sewage'' means sewage that consists of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surface or yard drains.

''Fluid'' means any material or substance which is capable of movement, whether in a semisolid, liquid, sludge, gas, or any other physical state.

''Formation'' means any body of rock characterized by a degree of lithologic homogeneity which is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.

''Hazardous Waste'' means any waste material which may pose a present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed including hazardous waste identified in accordance with Section 3001 of the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901, *et seq.*), as amended.

''Household Subsurface Sewage Disposal System'' means a subsurface sewage disposal system receiving domestic sewage from a single residential building and/or associated outbuildings where such a system is located on the same lot as the building served or on an easement available for the installation, operation and maintenance of the system and which is recorded on the land records.

''Injection'' means the subsurface emplacement of fluids by gravity or greater pressure through a well.

''Operator'' means the person or municipality responsible for operating and maintaining a well.

''Subsurface Sewage Disposal System'' means a system receiving domestic sewage consisting of a house sewer, a septic tank followed by a leaching system, any necessary pumps or siphons, and any groundwater control system on which the operation of the leaching system is dependent.

''Underground Source of Drinking Water (USDW)'' means an aquifer or a portion of an aquifer which supplies any public water supply system; or which contains a sufficient quantity of groundwater to supply a public water supply system and either currently supplies drinking water for human consumption, or contains fewer than 10,000 milligrams/litre total dissolved solids; and which is not an exempt aquifer under 146 CFR 146.04.

''Well'' means a bored, drilled, or driven shaft, or a dug hole, the depth of which is greater than its largest surface dimension or a commercial subsurface sewage

disposal system, household subsurface sewage disposal system, or other subsurface sewage disposal system.

(b) The injection of fluids through the following classes of wells is prohibited, and no person or municipality shall construct, install or maintain such wells:

(1) *Class I*

(A) Wells used by generators of hazardous wastes or owners or operators of hazardous waste management facilities or other industrial, commercial, institutional, or municipal facilities, to inject fluids beneath the lowermost formation containing an underground source of drinking water.

(2) *Class II*

Wells which inject fluids:

(A) Which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with wastewaters from gas plants which are an integral part of production operations, unless those wastewaters are classified as hazardous waste at the time of the injection.

(B) For enhanced recovery of oil or natural gas; and

(C) For storage of hydrocarbons which are liquid at standard temperature and pressure.

(3) *Class III*

Wells which inject fluids for extraction of minerals including:

(A) Mining of sulfur by the Frasch process;

(B) Solution mining of minerals;

(C) In-situ combustion of fossil fuel; and

(D) In-situ production of uranium or other metals, this category includes only in-situ production from ore bodies which have not been conventionally mined. Solution mining of conventional mines (such as stopes leaching) is included in Class V.

(4) *Class IV*

(A) Wells used by generators of hazardous wastes or of radioactive wastes, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous wastes or radioactive wastes into or above an aquifer.

(c) Wells other than those specified in subsection 22a-430-8 (c) shall be designated as Class V wells, and include but are not limited to: commercial subsurface sewage disposal systems, household subsurface sewage disposal systems, or other subsurface sewage disposal systems and wells associated with air conditioning and heat pumps. A person or municipality may inject fluids through Class V wells unless such injection may cause, allow or result in the movement of fluids which contain contaminants into underground sources of drinking water and the presence of the contaminants may adversely affect the public health or cause a violation of the Standards for Quality of Public Drinking Water, Section 19-13-B102 of the Regulations of Connecticut State Agencies, as amended.

(d) The owner or operator of any existing Class V well shall register the well with the Commissioner within one year of the effective date of these regulations. Such registration shall be on a form prescribed by the Commissioner and shall include information which he deems necessary.

The following shall be exempt from registration:

(1) Commercial subsurface sewage disposal systems, household subsurface sewage disposal systems, and other subsurface sewage disposal systems provided they have average daily flows of less than 5,000 gallons per day.

(2) Wells being operated pursuant to an unexpired discharge permit issued under Section 22a-430 of the Connecticut General Statutes, as amended.

(3) A well whose owner or operator has filed with the Commissioner OMB Form No. 158-R0170 published by the United States Environmental Protection Agency.

(e) If as a result of injection activity there is any movement of formation or injection fluids into underground sources of drinking water, the Commissioner may require the owner or operator to prevent such movement or to abandon or close the well by methods approved or prescribed by the commissioner.

(Effective February 23, 1984)

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Funding Assistance to Connecticut Municipalities and State Agencies for Planning, Design and Construction of Pollution Abatement Facilities

Sec. 22a-439-1. Introduction and priority management system

(a) **Purpose and Limitations**

These regulations are set forth to describe the manner and procedures by which state funding assistance shall be made available to and utilized by Connecticut municipalities to plan, design and construct water pollution abatement facilities pursuant to Section 22a-439 of the General Statutes. Any municipality which receives federal grant assistance under the Federal Clean Water Act, as amended, and a state matching grant shall be governed by applicable federal regulations only.

(b) **Definitions**

''Act'' means the Federal Clean Water Act (33 U.S.C. 1251 et seq., as amended).

''Ad valorem tax'' means a tax based upon the value of real property.

''Applicant'' means a municipality as defined in Section 22a-423.

''Architectural or engineering services'' means consultation, investigations, reporting and design services offered within the scope of the practice of architecture or professional engineering as defined by the laws of the State of Connecticut.

''Building'' means the erection, acquisition, alteration, remodeling, improvement or extension of pollution abatement facilities.

''Collector sewer'' means the common lateral sewers, within a publicly owned sewer system, which are primarily installed to receive wastewaters directly from facilities which convey wastewaters from individual systems, or from private property, and which include service ''Y'' connections designed for connection with those facilities including:

(A) Crossover sewers connecting more than one property on one side of a major street, road, or highway to a lateral sewer on the other side when more cost effective than parallel sewers and

(B) Pumping units and pressurized lines serving individual structures or groups of structures when such units are cost-effective and are owned and maintained by the municipality.

(C) This definition excludes other facilities which convey wastewater from individual structures, from private property to the public lateral sewer, or its equivalent and also excludes facilities associated with alternatives to conventional pollution abatement facilities in small communities.

''Combined sewer'' means a sewer that is designed as a sanitary sewer and a storm sewer.

''Compatible industrial wastewater'' means wastewater that is produced by an industrial user, has a pollutant strength and other characteristics similar to those of domestic wastewater, and can be efficiently and effectively transported and treated with domestic wastewater.

''Complete waste treatment system'' means a complete waste treatment system that consists of all the pollution abatement facilities necessary to meet the requirements of Title III of the Act, involving the transport of wastewater from individual homes or buildings to a plant or facility where treatment of the wastewater is accomplished; the treatment of the wastewater to remove pollutants; and the ultimate disposal, including recycling or reuse, of the treated wastewater and residues which result from the treatment process.

''Construction'' means the erection, building, acquisition, alteration, remodeling, improvement or extension of pollution abatement facilities or the inspection and supervision of any of the foregoing items.

''Cost Analysis'' means the review and evaluation of each element of subagreement cost to determine reasonableness, allocability and allowability.

''Design'' means studies, surveys, plans, working drawings, specifications, procedures, field testing of innovative and alternative wastewater treatment processes and techniques (excluding operation and maintenance) requisite for the construction of pollution abatement facilities.

''Excessive infiltration/inflow'' means the quantity of infiltration/inflow which can be economically eliminated from a sewer system as determined in a cost-effectiveness analysis that compares the costs for correcting the infiltration/inflow conditions to the total costs for transportation and treatment of the infiltration/inflow.

''Grantee'' means a municipality as defined in Section 22a-423.

''Individual systems'' means privately owned alternative pollution abatement facilities (including dual waterless/gray water systems) serving one or more principal residences or small commercial establishments. Normally these are onsite systems with localized treatment and disposal of wastewater, but may include systems serving a cluster of principal residences or small commercial establishments.

''Infiltration'' means water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

''Inflow'' means water other than wastewater that enters a sewer system (including sewer service connections) from sources such as, but not limited to: roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

''Initiation of operation'' means the date specified by the municipality on which use of the project begins for the purpose that it was planned, designed and built.

''Interceptor sewer'' means a sewer which is designed for one or more of the following purposes:

(A) To intercept wastewater from collector sewers and convey such wastes directly to a treatment facility or another interceptor.

(B) To replace an existing pollution abatement facility and transport the waste to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant.

(C) To transport wastewater from one or more municipal collector sewers to another municipality or to a regional plant for treatment.

(D) To intercept an existing discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to a pollution abatement facility.

''Municipality'' is as defined in Section 22a-423.

''Nonexcessive infiltration'' means the quantity of wastewater flow which cannot be economically and effectively eliminated from a sewer system as determined in a cost-effectiveness analysis.

''Nonexcessive inflow'' means the rainfall induced peak inflow rate which does not result in chronic operational problems related to hydraulic overloading of the pollution abatement facility during storm events. These problems may include surcharging, backups, bypasses, and overflows.

''Operation and maintenance'' means activities required to assure the dependable and economical function of pollution abatement facilities.

(A) Maintenance: Preservation of functional integrity and efficiency of equipment and structures. This includes preventive maintenance, corrective maintenance and replacement of equipment as needed during the useful life of the facility.

(B) Operation: Control of the unit processes and equipment which make up the pollution abatement facility. This includes financial and personnel management, records, laboratory control, process control, safety and emergency operation planning.

''Pollution abatement facility'' is as defined in Section 22a-423 and is synonymous with the terms project, treatment works, treatment system, and treatment facility.

''Pollution abatement facility phase or segment'' means any portion of a complete pollution abatement facility described in an approved engineering report which can be identified as a contract or discrete sub-item or subcontract. Completion of building of a pollution abatement facility phase or segment may, but need not in and of itself, result in an operable pollution abatement facility.

''Planning'' means all necessary engineering reports and studies to determine the feasibility of pollution abatement facilities including pertinent engineering, architectural, legal, fiscal and economic investigations prior to design.

''Project performance standards'' means the performance and operations requirements applicable to a project including the enforceable requirements of the Act and the specifications which the project is planned and designed to meet.

''Price analysis'' means the process of evaluating a prospective price without regard to the contractor's separate cost elements and proposed profit. Price analysis determines the reasonableness of the proposed subagreement price based on adequate price competition, previous experience with similar work, established catalog or market price law, or regulation.

''Principal residence'' means the habitation of a family or household for at least 51 percent of the year. Second homes, vacation or recreation residences are not included in this definition.

''Profit'' means the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price.

''Project schedule'' means a timetable specifying the dates of key project events including public notices of proposed procurement actions, subagreement awards, issuance of notice to proceed with building, key milestones in the building, initiation of operation and completion of the project.

''Replacement'' means expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary during the useful life of the pollution abatement facility to maintain the capacity and performance for which such works were designed and constructed. The term ''operation and maintenance'' includes replacement.

''Sanitary sewer'' means a conduit intended to carry liquid and watercarried wastes from residences, commercial buildings, industrial plants and institutions together with minor quantities of ground, storm and surface waters that are not admitted intentionally.

''Services'' means a contractor's labor, time or efforts which do not involve the delivery of a specific end item, other than documents which may result from the contractor's labor, time or efforts (e.g., reports, design drawings, specifications). This term does not include employment agreements or collective bargaining agreements.

''Small commercial establishments'' means for purposes of the provisions contained in these regulations providing funding for privately owned individual systems, private commercial establishments such as: restaurants, hotels, stores, filling stations, or recreational facilities; or private, non-profit entities such as: churches, schools, hospitals, or charitable organizations having dry weather wastewater flows of less than 25,000 gallons per day.

''Small community'' means for purposes of the provisions contained in these regulations providing funding for small community systems, any municipality with a population of 5,000 or less, or highly dispersed sections of large municipalities, as determined by the Commissioner.

''Storm sewer'' means a sewer designed to carry only storm waters, surface runoff, street wash waters and drainage.

''Subagreement'' means a written agreement between a grant recipient and another party (other than another public agency) and any lower tier agreement for services, supplies, equipment, or construction necessary to complete the project. Subagreements include contracts and subcontracts for personal and professional services, agreements with consultants and purchase orders.

''Useful life'' means the period during which a pollution abatement facility will be operated.

''User charge'' means a charge levied on users of a pollution abatement facility, or that portion of the ad valorem taxes paid by a user, for the user's proportionate share of the cost of operation and maintenance (including replacement) of such facility.

''Value engineering'' means a specialized cost control technique which uses a systematic and creative approach to identify and to focus on unnecessarily high cost in a project in order to arrive at a cost saving without sacrificing the reliability or efficiency of the project.

(c) **Development and Format of Project Priority List**

(1) Priority List Format

(A) The Commissioner shall make funding assistance available for projects on a state priority list as established under this section for such periods as authorized by the Legislature under Chapter 446k.

(B) The Commissioner shall prepare an ordered priority listing of projects for which state grant assistance shall be made available for the period effective October 1st to the following September 30th corresponding to the federal fiscal year.

(C) The priority list shall contain two portions: (i) a fundable portion consisting of those highest priority projects ready for construction and anticipated to be funded within the current federal fiscal year, and (ii) a planning portion consisting of those projects that may be funded from future authorized allotments. The priority list shall contain two parts; one for municipally owned pollution abatement projects and the second for state owned projects.

(d) **State Priority System and Project Priority List**

(1) Priority Rating Criteria

All projects eligible for funding assistance shall be evaluated and assigned a priority rating in accordance with the criteria set forth below and will appear on the project priority list. The Commissioner may determine that large-scale, multiphase projects be segregated and rated separately. Each project shall be evaluated and given points as applicable for each of the following rating criteria, the sum of which shall determine its priority number. These criteria are consistent with the rating system used to establish Federal construction grant project priorities and are shown in the following table:

Priority Rating Point System

I. Benefit of project upon adversely impacted potable water supplies. (10 points maximum)

A. Impaired water supply affecting less than 25 people — 2 points.

B. Impaired water supply affecting 26 to 100 people — 4 points.
C. Impaired water supply affecting 101 to 1,000 people — 6 points.
D. Impaired water supply affecting 1,001 to 5,000 people — 8 points.
E. Impaired water supply affecting more than 5,000 people — 10 points.
II. Benefit of project toward attainment of designated water quality standards and goals. (28 points maximum)
A. Project is necessary for attainment of water quality standards where the impacted water resource is:
1. Smaller than main stem of a sub-regional drainage basin or groundwater goals will be attained — 5 points.
2. Main stem of sub-regional drainage basin — 10 points.
3. Main stem of regional drainage basin — 15 points.
4. Main stem of major drainage basin — 20 points.
5. Projects which impact coastal areas are considered the equivalent of a regional drainage basin and assigned 15 points.
For the purposes of this subsection, the above drainage basin designations are defined on the map entitled ''Natural Drainage Basins in Connecticut: 1981'' prepared by the Natural Resources Center of the Department of Environmental Protection in cooperation with the United States Geological Services.
B. Project will enable impacted waters to meet minimum dissolved oxygen standards — 8 points.
III. Project will enhance specific water resource values. (24 points maximum)
A. Fishery resources — (6 points maximum).
1. Project will improve recreational fisheries — 3 points.
2. Project will improve anadromous fisheries — 6 points.
3. Project will open new streams for fish stocking programs — 6 points.
B. Shellfish resources — (6 points maximum).
1. Project will lower coliform bacteria levels in the waters of shellfish beds — 3 points.
2. Project will open new areas for shellfishing — 6 points.
C. Swimming (6 points maximum).
1. Project will enhance existing swimming opportunities — 3 points.
2. Project will allow for new swimming opportunities — 6 points.
D. Eutrophication — (6 points maximum).
1. Project will reduce eutrophication of a lake or impoundment by diverting septic system discharges out of a drainage basin — 3 points.
2. Project will reduce eutrophication of a lake or impoundment by providing nutrient removal in a municipal treatment plant or by relocating an existing treatment plant discharge — 6 points.
IV. Population equivalent (including commercial and industrial waste) initially served by the project. (12 points maximum)
A. Less than 5000 — 2 points.
B. 5,000 but less than 10,000 — 4 points.
C. 10,000 but less than 20,000 — 6 points.
D. 20,000 but less than 40,000 — 8 points.
E. 40,000 but less than 75,000 — 10 points.
F. 75,000 or greater — 12 points
V. Health and Sanitation Impacts. (6 points)
Project will eliminate ponding of sewage from failing septic systems, backup of sewage into basements, or overflow of sewage in streets (combined sewer overflow correction projects are not eligible for points).

VI. Miscellaneous. (20 points maximum)

A. Project involves the upgrading of an existing primary facility in order to comply with secondary treatment standards — 5 points.

B. Project that will result in Commissioner rescinding an Order concerning a sewer connection moratorium — 5 points.

C. Project will eliminate nuisance odors associated with treatment processes or pump stations but exclusive of large-scale expansion or upgrading of pollution abatement facilities — 5 points.

D. Remedial action will improve treatment plant operations where treatment standards are already being achieved — 5 points.

(NOTE: In cases where the priority rating or score is the same for two or more projects, the order is determined by highest score assigned cumulatively in criteria II (total), III (total), and IV. If a tie still remains, preference will be given to those projects ready to proceed at the earliest date within the limit of funds available.)

(2) Project Ranking Mechanism

The relative position or rank of a project on the priority list for funding will be determined by its priority number and its readiness to proceed to construction during the funding year under consideration. The Commissioner may choose to assign a higher rank for projects which fall into one of the following categories:

(A) *Category I* — Consists of projects for which a construction grant application was submitted for review during the previous funding period and which were on the fundable portion of that year's priority list. These applications have undergone preliminary review, are essentially complete and represent the good faith efforts of municipalities to comply with grant program requirements. Only those projects from the fundable portion of the previous year's priority list can be placed in this category.

(B) *Category II* — Consists of projects where previously funded segments of pollution abatement facilities have been built and are not usable or are severely restricted in use until the downstream project(s) are fully constructed and operational. This category enables these projects to be highly ranked for construction and thus allow full use of all facilities.

(C) *Category III* — Consists of projects which remedy documented pollution of potable water supplies. In order to qualify for high ranking for funding within this special category, projects must meet the following basic criteria: 1. the scope of the pollution problem is significant; 2. the affected water supply is not potable, i.e. does not meet minimum drinking water standards and requires treatment beyond chlorination; and 3. pollution abatement facilities are the cost-effective solution to the problem. This category does not apply to potential emergency use of class B waters for potable water supply as defined in the Connecticut Water Quality Standards adopted pursuant to Section 22a-426.

(3) Order of Funding Priority

The Commissioner shall distribute funds authorized under Section 22a-446 subject to the requirements for public hearing set forth in this section. The following funding designations establish the general order in which assistance is made. It is the goal to establish a balance between planning, design and construction. Therefore, all needs within the highest funding designation need not be fulfilled before proceeding to the next highest funding designation.

(A) State matching grants for projects defined under Section 22a-439 for advanced treatment pollution abatement facilities and new secondary treatment pollution abatement facilities jointly funded with the Federal Construction Grants Program.

(B) Funds for the construction of state-owned pollution abatement facilities as provided under Section 22a-439a.

(C) Funds to finance grants or advances for planning allowable under Section 22a-439 to provide for program continuity including future fundable projects and townwide planning efforts; and for design allowable under Sections 22a-439 and 22a-443 for projects planned to proceed to construction within three years of award.

(D) Funds to provide 55% grants for construction of municipal pollution abatement facilities eligible under the remaining provisions of Section 22a-439. Within this category the Commissioner may also establish reserves of funds for the following purposes:

(i) A reserve of funds to finance unanticipated cost increases for projects previously funded under Section 22a-439.

(ii) A reserve of funds sufficient to finance at least one small community project as determined by the Commissioner in Section 22a-439-3 (b).

(iii) A reserve of funds sufficient to finance regional septage disposal facilities determined eligible by the Commissioner.

(iv) A reserve of up to $1,000,000 for projects deemed by the Commissioner to qualify for special priority funding status. This reserve is intended to allow flexibility in providing grant assistance for unanticipated needs which may arise during the fiscal year and are deserving of special consideration. Such projects may include emergency potable water supply protection, correction of pollution problems which immediately threaten the public health, expedited planning studies or investigations, or other unexpected high priority concerns.

(4) Annual Public Hearing

The amount of funds applied to each of the funding designations described above shall be determined annually by the Commissioner based upon available funds and shall be designated in a draft priority list. The draft priority list will indicate which specific projects are proposed to receive funding within each funding designation for the upcoming Federal fiscal year and shall be made available to appropriate local officials at least 30 days prior to a specified date for Public Hearing. The Commissioner will consider all written and oral testimony presented at the Hearing and may elect to modify the draft priority list on the basis of such testimony. The Commissioner shall also indicate his reasons for accepting or rejecting any suggested revisions as part of the Hearing record. Following notice of any changes to the priority list which may result from the Hearing, the priority list shall be deemed final except for minor revisions allowable under Section 22a-439-1 (e) (5).

(5) Revisions to the Priority List

(A) The priority system shall include a project bypass procedure. The Commissioner may bypass a project on the fundable portion of the priority list if he determines that the bypassed project will not be ready to proceed within the first six months of the funding year. The Commissioner shall advise, in writing, each municipality he intends to bypass and the reasons therefore. Projects that are bypassed will retain their relative priority rating for consideration in future years. Projects bypassed will be replaced by the next highest ranking project ready to proceed. Projects will be removed from the priority list the following year after they receive a grant.

(B) Revisions to the priority list may be made at any time during the funding period. If the Commissioner determines the change to be significant, a public hearing with appropriate notice will be held and all affected by such a change will be notified directly.

(Effective August 22, 1985)

Sec. 22a-439-2. Requirements for grants application

(a) **Types of Projects.**

The Commissioner is authorized to award grant assistance for the following types of projects:

(1) Planning grants and planning advances for the preparation of engineering reports.

(2) Design grants and design advances for preparation of contract plans and specifications.

(3) Construction grants for building of pollution abatement facilities and sewers.

(b) **Level of State Assistance.**

The amount of state funding assistance shall be based on the Commissioner's determination of eligibility and the provisions of Section 22a-439 of the Connecticut General Statutes.

(c) **Grant Applications.**

A municipality applying for state funding assistance must file properly executed forms and applications prescribed by the Commissioner. In addition, the following supporting documentation shall be submitted as appropriate:

(1) An application for Engineering Report Funding Assistance shall include:

(A) A Plan of Study including:

(i) The proposed planning area;

(ii) An identification of the entity or entities that will be conducting the planning;

(iii) The nature and scope of the proposed planning project and public participation program, including a schedule for the completion of specific tasks; and

(iv) An itemized description of the estimated engineering report costs.

(B) Proposed subagreements, or an explanation of the intended method of awarding subagreements, for performance of any substantial portion of the project.

(C) A resolution adopted by the municipality's Water Pollution Control Authority authorizing a specific person to file the application and execute the agreement for the grant. The resolution must be certified and sealed by the Town/City Clerk.

(D) Documented evidence that local share funding is in place.

(2) An Application for Design Funding Assistance shall include:

(A) An engineering report meeting all the requirements set forth in Section 22a-439-3 (a).

(B) Proposed subagreements, or an explanation of the intended method of awarding subagreements, for performance of any substantial portion of the project.

(C) A resolution adopted by the municipality's Water Pollution Control Authority authorizing a specific person to file the application and execute the agreement for the grant. The resolution must be certified and sealed by the Town/City Clerk.

(D) A value engineering (VE) commitment in compliance with Section 22a-439-3 (d) for all design funding assistance applications for projects with a projected total building cost of $10 million or more, including the cost for interceptor and collector sewers. For those projects requiring VE, the municipality may propose, subject to the Commissioner's approval, to exclude interceptor and collector sewers from the scope of the VE analysis.

(E) Proposed or executed (as determined appropriate by the Commissioner) intermunicipal agreements necessary for the construction and operation of the proposed pollution abatement facility for any facility serving two or more municipalities.

(F) A schedule for initiation and completion of the project work.

(G) Documented evidence that local funding is in place for the design and construction phases of the pollution abatement facilities.

(3) An Application for Construction Grant Assistance shall include:

(A) All requirements for design funding assistance as specified in Section 22a-439-2 (c) (2).

(B) A final legal opinion stating that the acquisition of all sites, easements or rights-of-way necessary to assure undisturbed construction and operation and maintenance of the proposed project have been acquired. The cost of any real property eligible for funding assistance must reflect fair market value as determined by standard recognized appraisal methods.

(C) Two copies of contract plans and specifications for the review and approval of the Commissioner.

(D) A schedule for submission of a proper operation and maintenance program including a preliminary plan of operation.

(E) An approved user charge system developed in accordance with the requirements set forth in Section 22a-439-3 (e).

(4) Terms of Funding Assistance

(A) No grant award shall be made for a pollution abatement facility that would provide capacity for new connections or other developments to be located in environmentally sensitive land such as wetlands, floodplains, prime agricultural lands, or regulated coastal zones. Appropriate and effective grant conditions (e.g. restricting sewer hook-ups) should be used where necessary to protect these resources from new development.

(B) The prime purpose in the award of construction grant assistance is to solve existing pollution problems and not intended to assist in new development.

(C) For engineering reports and design, no grant assistance will be allowed for any engineering work performed before a grant award without the prior written approval of the Commissioner.

(D) Except as otherwise provided in this paragraph, no grant assistance for construction may be awarded for any construction which is initiated prior to the date of grant award. Preliminary construction work, such as advance acquisition of major equipment items requiring long lead times, acquisition of an option for the purchase of eligible land, or advance construction of minor portions of a pollution abatement facility, including associated engineering costs, in emergencies or instances where delay could result in significant cost increases, may be approved by the Commissioner after completion of environmental review, but only if the municipality submits a written and adequately substantiated request.

(E) The approval of a plan of study, an engineering report, plans and specifications or advance acquisition of equipment or advance construction will not constitute a commitment or approval of grant assistance for a subsequent phase of the project. In instances where such approval is obtained the applicant proceeds at its own risk, since payment for such costs cannot be made unless grant assistance for the project is awarded.

(F) The municipality shall notify the Commissioner that it has complied or will comply with the applicable procurement provisions of Section 22a-439-4 (f), (g) and (h) before the award of any grant assistance.

(G) Within ninety (90) days after receipt of a completed application (excluding suspension periods for submission of supplemental information), the Commissioner will take one of the following actions: 1. approve for grant award; 2. defer due to lack of funding; or 3. disapprove the application. The applicant shall be promptly notified in writing of any deferral or disapproval. A deferral or disapproval of an application shall not preclude its reconsideration or a reapplication.

(H) The Commissioner will transmit the grant agreement to the applicant for execution. The grant agreement must be executed by the applicant and returned within 3 calendar weeks after receipt. The grant agreement shall set forth the approved project scope, budget (including the state share), total project costs, and the approved commencement and completion dates for the project or major phases thereof.

(I) The grant agreement shall set forth the amount of grant assistance. The grant amount may not exceed the amount of funds available for obligation in Section 22a-446. Grant payments will be limited to the State share of allowable project costs incurred within the grant amount or any increases effected through grant amendments.

(J) The amount and term of a grant shall be determined at the time of grant award. The time period is subject to extension for excusable delay, at the discretion of the Commissioner.

(Effective August 22, 1985)

Sec. 22a-439-3. Technical program elements

(a) **Engineering Report Requirements**

(1) General

Engineering reports consist of those necessary plans and studies which directly relate to the development of pollution abatement strategies and the construction of pollution abatement facilities necessary to comply with an Order to Abate Pollution as defined in Section 22a-423. The engineering report will demonstrate the need for the proposed pollution abatement facility through an evaluation of all feasible alternatives and shall demonstrate that the selected alternative is cost-effective, i.e. is the most economical means of meeting effluent and water quality goals while recognizing environmental considerations.

(2) Content of Engineering Reports

The content of the engineering report shall be determined by the Commissioner based on a pre-report conference with the municipality and its engineering consultant regarding the precise plan of study (engineering report outline) and resulting scope of services to be performed. Engineering reports must address as a minimum each of the following as determined appropriate by the Commissioner:

(A) A detailed evaluation of the existing and potential wastewater treatment and disposal problems in the study area.

(B) A cost-effective analysis of alternatives available to correct the pollution problems identified. The final selection of alternative(s) to correct the problems noted shall be based on the results of the cost-effectiveness analysis. The monetary costs to be considered must include the present worth or equivalent annual value of all capital costs and operation, maintenance and replacement costs. The interest rate used for this analysis shall be the rate established by the Federal Water Resources Council for use in federally funded projects. The population forcasting in the analysis shall be consistent with current projections of the Connecticut Office of Policy and Management. A cost-effective analysis shall include:

(i) The relationship of the size and capacity of the recommended facilities to the needs to be served, including any reserve capacity.

(ii) An evaluation of alternative flow and waste reduction measures, including nonstructural methods.

(iii) An evaluation of improved effluent quality attainable by upgrading the operation and maintenance and efficiency of existing facilities as an alternative or supplement to construction of new pollution abatement facilities.

(iv) An evaluation of the capability of each alternative to meet applicable effluent limitations and water quality standards.

(v) Appropriate consideration should be given to various treatment techniques including: conventional biological or physical-chemical treatment and discharge systems; land application techniques and other innovative and alternative techniques which may result in recycling of water and pollutants; onsite and nonconventional systems, both community and individual.

(vi) An evaluation of the alternative methods for the ultimate disposal of treated wastewater and sludge materials resulting from the treatment process and a justification for the method(s) chosen.

(vii) An adequate assessment of the expected environmental impact of alternatives (including sites) under the requirements of Section 22a-1a to 1f, inclusive, of the Connecticut General Statutes.

(C) If applicable, a demonstration of the non-existence or possible existence of excessive infiltration/inflow in the affected sewerage system.

(D) An identification of proposed effluent discharge limits if appropriate and a description of how the proposed project will result in compliance with any pollution abatement order issued by the Commissioner.

(E) A summary of public participation in the development of the engineering report.

(F) A brief statement demonstrating that the local authorities who will be implementing the plan have the necessary legal, financial, institutional, and managerial resources available to insure the construction, operation and maintenance of the proposed pollution abatement facilities.

(G) A brief description of potential opportunities for recreation, open space, and access to bodies of water afforded by the recommended project.

(H) For the selected alternative, a concise description of at least the following:

(i) Estimated capital construction and operation and maintenance costs (identifying state and local shares) and a description of the manner in which local costs will be financed.

(ii) Estimated cost of future expansion and long term needs for reconstruction of pollution abatement facilities following their useful life.

(iii) Cost impacts on pollution abatement facility users.

(iv) A statement concerning the availability and estimated cost of any proposed treatment sites.

(3) Public Participation

(A) The scope and level of detail of the public participation program shall be determined during the development of the plan of study. The program shall be comprised of public forums such as workshops, meetings and hearing(s) as necessary to promote public awareness and input into the planning process.

(B) At a minimum, prior to adoption of the engineering report, the municipality must hold a public hearing to describe the proposed program and action(s) and to assure that the public's concerns are fully considered.

(C) The time and place of the public hearing shall be conspicuously and adequately announced at least 10 days in advance, or for such longer period as may be required by local ordinance or charter. Copies of the engineering report must be made available for inspection by the public at least 10 days prior to the hearing.

(D) A request to waive the public hearing on an engineering report may be submitted in writing to the Commissioner when the municipality determines a public hearing is not necessary and would not serve the public interest.

(4) Federal Requirements

Compliance with the engineering report requirements set forth herein does not constitute or imply compliance with similar federal grant program requirements for construction of pollution abatement facilities. In the event that the municipality may seek federal grant funds for a project, additional issues may have to be addressed in the engineering report to meet federal requirements in effect at that time.

(b) **Small Community Systems**

Projects proposed to be funded from the reserve for small communities shall be for improvements to existing wastewater treatment systems or new interceptor sewers and treatment works serving small communities. Routine interceptor sewer extensions within municipalities that do not meet the definition of a small community are not eligible for funding from this reserve. Categories of projects eligible for grant assistance under this reserve are (1) projects involving improvements to or construction of interceptor sewers and treatment works for which the entire proposed service area within the municipality meets the definitions of a small community and (2) projects for interceptor sewers connecting a service area meeting the definition of a small community to a wastewater treatment facility in another municipality. In order to be eligible for grant funding under this reserve, the applicant must demonstrate to the satisfaction of the Commissioner that the only alternative to the proposed project would be the construction of new treatment works which would involve a discharge of treated wastewater which would result in violation of or require a revision to the State's Water Quality Standards and Criteria as adopted pursuant to Section 22a-426 of the Connecticut General Statutes, as amended.

(c) **Privately Owned Individual Systems**

(1) A municipality may apply for a grant to construct privately owned pollution abatement facilities serving one or more principal residence or small commercial establishments.

(2) In addition to the engineering report requirements set forth in Section 22a-439-3 (a) the municipality shall:

(A) Demonstrate that the total present worth cost and environmental impact of building the individual systems will be less than the present worth cost of a larger municipally owned pollution abatement facility.

(B) Demonstrate to the satisfaction of the Commissioner that the individual systems proposed are part of a technically feasible and implementable program which will successfully address all existing and potential wastewater treatment needs within the planning area.

(C) Certify that the principal residence or small commercial establishment was constructed before July 11, 1983, and inhabited or in use on or before that date.

(D) Apply on behalf of a number of individual units to be served in the planning area.

(E) Certify that, where public ownership of such works is not feasible, the municipality will have unlimited right of access to the site and to the system for the purpose of necessary inspection, maintenance, and repair.

(F) Certify that such treatment works will be properly operated and maintained and will comply with all other requirements of these regulations, state statutes, and the Regulations of Connecticut State Agencies.

(G) Certify that a user charge system established in compliance with these regulations will be developed and implemented to ensure the availability of financial resources sufficient to ensure the proper operation, maintenance, and eventual repair or replacement of grant funded facilities and those individual systems which are

within the service area identified in paragraph (B) above but which are not required and replaced with the assistance of state grant funds.

(d) **Value Engineering (VE)**

(1) Value engineering proposal. All design funding assistance applications for projects having a projected total building cost of $10 million or more, including the cost for interceptor and collector sewers, will contain a VE commitment. The VE proposal must contain sufficient information for the Commissioner to determine the adequacy of the VE effort and the justification of the proposed VE fee. Essential information shall include the scope of VE analysis, VE team and VE coordinator (names and background), level of VE effort, VE cost estimate, and VE schedule in relation to project schedule (including completion of VE analysis and submittal of VE summary reports). The VE coordinator and a majority of the VE team members shall be employed by a firm (or firms) other than the design engineering consultant.

(2) Value engineering analysis. When the VE analysis is completed, a preliminary report summarizing the VE findings and a final report describing implementation of the VE recommendations must be submitted to the Commissioner.

(3) Implementation. For those projects on which a VE analysis has been performed, VE recommendations shall be implemented to the maximum extent feasible as determined by the Commissioner. The Commissioner shall consider VE recommendations on the basis of cost-effectiveness, reliability, and other factors that may be critical to the treatment processes and the environmental impact of the project and the extent of project delays.

(e) **User Charge System**

The user charge system must be designed to produce adequate revenues required for the operation, maintenance, and replacement of the pollution abatement facilities. It shall provide that each user which discharges wastewaters to the system that cause an increase in the cost of operating and maintaining pollution abatement facilities shall pay for such increased cost. The user charge system shall be based on either actual use or ad valorem taxes as follows:

(1) User charge system based on actual use. A municipality's user charge system based on actual use (or estimated use) of wastewater treatment services shall provide that each user (or user class) pays its proportionate share of operation and maintenance (including replacement) costs of pollution abatement facilities within the municipality's service area, based on the user's proportionate contribution to the total wastewater loading from all users (or user classes).

(2) User charge system based on ad valorem taxes. A municipality's user charge system which is based on ad valorem taxes shall provide that:

(A) On the effective date of these regulations, the municipality had in existence a system of dedicated ad valorem taxes which collected revenues to pay the cost of operation and maintenance of pollution abatement facilities within the municipality's service area and the municipality has continued to use that system.

(B) Each member of the industrial user and commercial user class which discharges more than 25,000 gallons per day of sanitary waste pays its share of the costs of operation and maintenance (including replacement) of the pollution abatement facilities based upon charges for actual use.

(C) If the Commissioner determines that the municipality has historically demonstrated that the ad valorem system has resulted in proper operation and maintenance and management of the pollution abatement facilities including the sewer system.

(3) Notification. Each user charge system must provide that each user be notified, at least annually, in conjunction with a regular bill, of the rate and that portion of

the user charges or ad valorem taxes which are attributable to wastewater treatment services.

(4) Financial management system. Each user charge system must include an adequate financial management system that will accurately account for revenues generated by the system and expenditures for operation and maintenance (including replacement) of the treatment system.

(5) Charges for operation and maintenance for extraneous flows. The user charge system shall provide that the costs of operation and maintenance for all flow not directly attributable to users (i.e., infiltration/inflow) be distributed among all users based upon either of the following:

(A) In the same manner that it distributes the costs for their actual use, or

(B) Under a system which uses one or any combination of the following factors on a reasonable basis:

(i) Flow volume of the users.

(ii) Land area of the users.

(iii) Number of hookups or discharges of the users.

(iv) Property valuation of the users, if the municipality has an approved user charge system based on ad valorem taxes.

(6) Adoption of system. One or more municipal legislative enactments or other appropriate authority must incorporate the user charge system. If the project is a treatment system accepting wastewaters from other municipalities, the subscribers receiving waste treatment services from the municipality shall adopt user charge systems in accordance with this section. These user charge systems shall also be incorporated in appropriate municipal legislative enactments or other appropriate authority of all municipalities contributing wastes to the pollution abatement facilities. Grant payments shall not exceed 90% of the total construction grant award until the municipality has adopted the approved user charge system.

(7) Implementation of system. The municipality shall implement its user charge system before the pollution abatement facility is placed in operation.

(f) **Sewer Use Ordinance**

(1) Each municipality applying for grant assistance shall demonstrate to the satisfaction of the Commissioner that a sewer use ordinance or other legally binding requirement has been or will be enacted and will be enforced in each jurisdiction served by the pollution abatement facility before the completion of construction. The ordinance shall prohibit any new connections from inflow sources into the sanitary sewer portions of the pollution abatement facility, shall insure that new sewers and connections to the pollution abatement facility are properly designed and constructed, and shall require that all wastewaters introduced into the pollution abatement facility will not contain toxics or other pollutants in amounts or concentrations that endanger public safety and physical integrity of the pollution abatement facility, cause violation of the conditions of any permit issued by the Commissioner, or preclude the selection of the most cost-effective alternative for wastewater treatment and sludge disposal.

(2) Grant payments shall not exceed 50% of the total construction grant award until the municipality has submitted a copy of its sewer use ordinance to the Commissioner for review.

(3) Grant payments shall not exceed 90% of the total construction grant award until the municipality's sewer use ordinance has been approved by the Commissioner and enacted by the municipality.

(4) The municipality shall adopt and implement its sewer use ordinance before the pollution abatement facility is placed in operation.

(g) **Infiltration/Inflow**

(1) General. The municipality shall demonstrate to the Commissioner's satisfaction that each sewer system discharging into the proposed pollution abatement facility is not or will not be subject to excessive infiltration/inflow. For combined sewers, inflow is not considered excessive in any event.

(2) Inflow. If the rainfall induced peak inflow rate results or will result in chronic operational problems during storm events, the municipality shall perform a study of the sewer system to determine the quantity of excessive inflow and to propose a rehabilitation program to eliminate the excessive inflow. All cases in which pollution abatement facilities are planned for the specific storage and/or treatment of inflow shall be subject to a cost-effective analysis.

(3) Infiltration.

(A) If the flow rate at the existing pollution abatement facility is 150 gallons per capita per day or less during periods of high groundwater, the municipality shall build the project including sufficient capacity to transport and treat any existing infiltration. However, if the municipality believes any specific portion of its sewer system is subject to excessive infiltration, the municipality may confirm its belief in a cost-effective analysis and propose a sewer rehabilitation program to eliminate that specific excessive infiltration.

(B) If the flow rate at the existing pollution abatement facility is significantly more than 150 gallons per capita per day during periods of high groundwater, the municipality shall perform a study of the sewer system to determine the quantity of excessive infiltration and to propose a sewer rehabilitation program to eliminate the excessive infiltration.

(C) If the flow rate at the existing pollution abatement facility is not significantly more than 150 gallons per capita per day, the municipality may request the Commissioner to determine that the project proceed without further study.

(D) The Commissioner may authorize the municipality to perform minor sewer system rehabilitation concurrently with the sewer system evaluation survey if there is no adverse environmental impact. Rehabilitation which would be a part of the municipality's normal operation and maintenance responsibilities shall not be fundable.

(h) **Reserve Capacity**

The Commissioner will limit grant assistance for reserve capacity in pollution abatement facilities as follows:

(1) No grant shall be made to provide reserve capacity for a project for secondary or more stringent treatment or new interceptors and appurtenances. Grants for such projects shall be based on capacity necessary to serve existing needs as determined on the date of award of the construction grant and shall be consistent with the definition for eligible capacity established for the Federal Construction Grants Program in 40 CFR 35.2123.

(2) The Commissioner may require the construction of reasonable reserve capacity.

(3) All incremental costs for any reserve capacity in excess of that provided for herein shall be paid solely by the grantee. Incremental costs include all costs which would not have been incurred but for the additional reserve capacity.

(Effective August 22, 1985)

Sec. 22a-439-4. Administrative program elements

(a) **Allowable project costs.** Those costs associated with the planning, design and construction of pollution abatement facilities eligible for state funding assistance are as follows:

(1) Costs of salaries, benefits, and expendable materials the municipality incurs for the project, except as provided for in Section 22a-439-4 (b) (8).

(2) Costs under construction contracts.

(3) Professional and consultant services.

(4) Engineering report costs directly related to the pollution abatement facility.

(5) Sewer system evaluation.

(6) Project feasibility and related engineering reports.

(7) Costs of complying with the Connecticut Environmental Policy Act including costs of public notices and hearings.

(8) Preparation of construction drawings, specifications, estimates and construction contract documents.

(9) Reasonable landscaping.

(10) Materials acquired, consumed, or expended specifically for the project.

(11) Shop equipment installed at the pollution abatement facility necessary to the operation of the facility.

(12) A reasonable inventory of laboratory chemicals and supplies necessary to initiate plant operations.

(13) Development and preparation of a plan of operation and an operation and maintenance manual.

(14) Start-up services for new pollution abatement facilities.

(15) Project identification signs.

(16) Costs of complying with the procurement requirements of these regulations.

(17) The costs of technical services for assessing the merits of or negotiating the settlement of a claim by or against the municipality provided:

(A) A formal grant amendment is executed specifically covering the costs before they are incurred.

(B) The costs are not incurred to prepare documentation that should be prepared by the contractor to support a claim against the municipality.

(C) The Commissioner determines that there is a significant State interest in the issues involved in the claim.

(18) Change orders and the costs of meritorious contractor claims for increased costs provided the costs are not caused by the municipality's mismanagement or vicarious liability for the improper action of others. Settlements, arbitration awards, and court judgments which resolve contractor claims shall be reviewed by the Commissioner and shall be allowable only to the extent they are not caused by municipality mismanagement, are reasonable, and do not attempt to pass on to the State of Connecticut the costs of events that were the responsibility of the municipality, contractor or others.

(19) Costs necessary to mitigate only direct, adverse, or physical impacts resulting from the building of the pollution abatement facility.

(20) The costs of groundwater monitoring facilities necessary to determine the possibility of groundwater deterioration, depletion or modification resulting from the project.

(21) For individual and small community systems, allowable costs include:

(A) The cost of major rehabilitation, upgrading, enlarging and installing small and onsite systems, but in the case of privately owned systems, only for principal residences.

(B) Conveyance pipes from property line to an offsite treatment unit which serves a cluster of buildings.

(C) Treatment and treatment residue disposal portions of toilets with composting tanks, oil flush mechanisms, or similar in house devices.

(D) Treatment or pumping units from the incoming flange when located on private property and conveyance pipes, if any, to the collector sewer.

(E) The cost of restoring individual system building sites to their original condition.

(22) Necessary safety equipment applicable to Federal, State and local requirements.

(23) A portion of the costs of collection system maintenance equipment as determined by the Commissioner.

(24) The cost of mobile equipment necessary for the operation of the overall pollution abatement facility, transmission of wastewater or sludge or for the maintenance of equipment. These items include:

(A) Portable stand-by generators.

(B) Large portable emergency pumps to provide ''pump-around'' capability in event of pump station failure or pipeline breaks.

(C) Sludge or septic tanktrucks, trailers, and other vehicles having as their sole purpose the transportation of liquid or dewatered wastes from the collector point (including individual or on-site systems) to the pollution abatement facility or disposal site.

(25) Replacement parts identified and approved in advance by the Commissioner as necessary to assure uninterrupted operation of the pollution abatement facility, provided they are critical parts or major system components which are:

(A) Not immediately available and/or whose procurement involves an extended ''lead-time'';

(B) Identified as critical by the equipment supplier(s); or

(C) Critical but not included in inventory provided by the equipment supplier(s).

(26) Allowable costs for infiltration/inflow include:

(A) The cost of sewer system and pollution abatement facility capacity adequate to transport and treat nonexcessive infiltration/inflow.

(B) The costs of sewer system rehabilitation necessary to eliminate excessive infiltration/inflow as determined in a sewer system evaluation study under Section 22a-439-3 (g).

(27) The costs of royalties for the use of rights in a patented process or product with the prior approval of the Commissioner.

(28) The cost of legal and engineering services incurred by the municipality in deciding procurement protests and defending their decisions in protest appeals with the prior approval of the Commissioner.

(29) The cost of the services of the prime engineer required under Section 22a-439-4 (n) (10) during the first year following initiation of operation of the pollution abatement facility.

(30) The costs of municipal employees attending training workshops/seminars that are necessary to provide instruction in administrative, fiscal or contracting procedures required to complete the construction of the pollution abatement facility, if approved in advance by the Commissioner.

(b) **Unallowable Project Costs.**

Costs which are not necessary for the construction of a pollution abatement facility are unallowable. Such costs include, but are not limited to:

(1) Basin or areawide planning not directly related to the project.

(2) Bonus payments not legally required for completion of construction before a contractual completion date.

(3) Personal injury compensation or damage arising out of the project whether determined by arbitration, negotiation, or otherwise.

(4) Unallowable costs for small and onsite systems include:

(A) Modification to physical structure of homes or commercial establishments.

(B) Conveyance pipes from the house to the treatment unit located on users property.

(C) Wastewater generating fixtures such as commodes, sinks, tubs and drains.

(5) Fines and penalties due to violations of, or failure to comply with Federal, State, or local laws and regulations.

(6) Costs outside the scope of the approved project.

(7) Approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project and the interest on them.

(8) Ordinary operating expenses of local government, such as salaries and expenses of a mayor, city council members, or city attorney, except as provided in Section 22a-439-4 (f) (13).

(9) The costs of acquisition (including associated legal, administrative, and engineering) of sewer rights-of-way, pollution abatement facility sites (including small systems sites), sanitary landfill sites and sludge disposal sites, except as provided in Section 22a-439-4 (c).

(10) Costs for which payment has been or will be received under any Federal assistance program.

(11) The cost of vehicles used primarily for transportation, such as pickup trucks.

(12) Costs of equipment or materials acquired in violation of the procurement provisions of these requirements.

(13) The cost of furnishings including draperies, furniture and office equipment.

(14) The cost of ordinary site and building maintenance equipment such as lawn mowers, snowblowers and vacuum cleaners.

(15) Costs of monitoring equipment used by industry for sampling and analysis of industrial discharges to a municipal pollution abatement facility.

(16) Construction of privately-owned pollution abatement facilities, including pretreatment facilities, except for individual systems.

(17) Preparation of applications, including a plan of study and permits required by Federal, State or local laws and regulations.

(18) Administrative, engineering and legal activities associated with the establishment of special departments, agencies, commissions, regions, districts or other units of government.

(19) The cost of a pollution abatement facility or any part thereof that would provide capacity for new habitation or other establishments to be located on environmentally sensitive land such as wetlands, floodplains, or prime agricultural lands.

(20) The costs of legal services for assessing the merits of defending or negotiating the settlement of a claim by or against the municipality.

(21) All incremental costs of delay due to the award of any significant subagreements for construction more than 12 months after the construction grant award.

(c) **Allowable Project Costs, If Approved.**

(1) The cost (including associated legal, administrative and engineering costs) of land acquired in fee simple or by lease or easement that will be an integral part of the treatment process or that will be used for the ultimate disposal of residues resulting from such treatment provided the Commissioner approves it in the grant agreement. These costs include:

(A) The cost of a reasonable amount of land, considering irregularities in application patterns, and the need for buffer areas, berms, and dikes.

(B) The cost of land acquired for a soil absorption system for a group of two or more homes.

(C) The cost of land acquired for composting or temporary storage of compost residues which result from wastewater treatment.

(D) The cost of land acquired for storage of treated wastewater in land treatment systems before land application.

(E) The cost paid by the municipality for eligible land in excess of just compensation based on the appraised value, the municipality's record of negotiation or a condemnation proceeding, as determined by the Commissioner, shall be unallowable.

(2) The cost associated with the preparation of the pollution abatement facility site before, during and, to the extent agreed on in the grant agreement, after building. These costs include:

(A) The cost of demolition of existing structures on the pollution abatement facilities site (including rights-of-way) if building cannot be undertaken without such demolition.

(B) The cost of removal, relocation or replacement of utilities, for which the municipality is legally obligated to pay under Section 22a-470 of the Connecticut General Statutes.

(C) The cost of restoring streets and rights-of-way to their original condition. The need for such restoration must result directly from the construction and is generally limited to repaving the width of trench.

(3) The cost of acquiring all or part of existing publicly or privately owned pollution abatement facilities provided all following criteria are met:

(A) The acquisition, in and of itself considered apart from any upgrade, expansion or rehabilitation, provides new pollution control benefits.

(B) The acquired pollution abatement facility was not built with previous Federal or State financial assistance.

(C) The primary purpose of the acquisition is not the reduction, elimination, or redistribution of public or private debt.

(d) **Required Provisions for Architectural/Engineering Contracts**

(1) Subagreement Enforcement

(A) Commissioner's Authority. At a municipality's request the Commissioner may provide technical and legal assistance in the administration and enforcement of any subagreement related to a pollution abatement facility for which a State grant was made and intervene in any civil action involving the enforcement of such subagreements, including subagreement disputes which are the subject of either arbitration or court action. Any assistance to be provided is at the discretion of the Commissioner and in a manner determined by him to best serve the public interest. Factors which the Commissioner may consider in determining whether to provide assistance include:

(i) Available agency resources.

(ii) Planned or ongoing enforcement action.

(iii) The municipality's demonstration of good faith in attempting to resolve the contract matters at issue.

(iv) The municipality's adequate documentation of the need for assistance.

(v) The state's interest in the contract matters at issue.

(B) Municipality request. The municipality's request for technical or legal assistance should be submitted in writing and be accompanied by documentation adequate to inform the Commissioner of the nature and necessity of the requested assistance.

(C) Privity of subagreement. The Commissioner's technical or legal involvement in any subagreement dispute will not make the Commissioner a party to any subagreement entered into by the municipality.

(D) Municipality responsibility. The provisions of technical or legal assistance under this section in no way releases the municipality from its obligations under these regulations or affects the Commissioner's right to take remedial action against a municipality that fails to carry out those obligations.

(2) Subagreement Provisions

Municipalities shall include subagreement clauses that meet the following requirements:

(A) Each subagreement must include provisions defining a sound and complete agreement, including the:

(i) Nature, scope, and extent of work to be performed.

(ii) Time frame for performance.

(iii) Total cost of the subagreement.

(iv) Payment provisions.

(B) All subagreements awarded in excess of $10,000 shall contain provisions requiring compliance with State and Federal equal employment opportunity laws and regulations.

(3) Model Subagreement Clauses

Muncipalities must include the following clauses or their equivalent in all subagreements for architectural or engineering services. Municipalities may substitute other terms for ''municipality'' and ''engineer'' in their subagreements.

(A) Supersession

The municipality and the engineer agree that this and other appropriate clauses in this section or their equivalent apply to the state grant eligible work to be performed under this subagreement and that these clauses supersede any conflicting provisions of this subagreement.

(B) Privity of Subagreement

This subagreement is expected to be funded in part with funds from the State of Connecticut, Department of Environmental Protection (DEP). Neither the State nor any of its departments, agencies, or employees is or will be a party to this subagreement or any lower tier subagreement. This subagreement is subject to regulations adopted pursuant to Section 22a-439 of the Connecticut General Statutes in effect on the date of the grant award for the project.

(C) Changes

(i) The municipality may at any time, by written order, make changes within the general scope of this subagreement in the services or work to be performed. If such changes cause an increase or decrease in the engineer's cost or time required to perform any services under this agreement, whether or not changed by any order, an equitable adjustment shall be made and this subagreement shall be modified in writing. The engineer must assert any claim for adjustment under this clause in writing within 30 days from the date of receipt by the engineer of the notification

of change unless the municipality grants additional time before the date of final payment.

(ii) No services for which an additional compensation will be charged by the engineer shall be furnished without the written authorization of the municipality.

(D) Termination

(i) This subagreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill obligations under this subagreement through no fault of the terminating party. However, no termination may be effected unless the other party is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(ii) This subagreement may be terminated in whole or in part in writing by the municipality for its convenience, provided that the engineer is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(iii) In the event that there is a modification of the Commissioner's requirements relating to the services to be performed under this agreement after the date of execution of this agreement, the increased or decreased cost of performance of the services provided for in the agreement shall be reflected in an appropriate modification of this agreement.

(iv) If termination for default is effected by the municipality, an equitable adjustment in the price provided for in this subagreement shall be made, but no amount shall be allowed for anticipated profit on unperformed services or other work and any payment due to the engineer at the time of termination may be adjusted to cover any additional costs to the municipality because of the engineer's default. If termination for default is effected by the engineer; or if termination for convenience is effected by the municipality; the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to the engineer for services rendered and expenses incurred prior to the termination, in addition to termination and settlement costs reasonably incurred by the engineer relating to commitments which had become firm prior to the termination.

(v) Upon receipt of a termination action pursuant to paragraphs (i) or (ii) above, the engineer shall promptly discontinue all services affected (unless the notice directs otherwise) and deliver or otherwise make available to the municipality all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the engineer in performing this subagreement, whether completed or in process.

(vi) Upon termination under paragraphs (i) or (ii) above, the municipality may take over the work and prosecute the same to completion by subagreement with another party or otherwise.

(vii) If, after termination for failure of the engineer to fulfill contractual obligations, it is determined that the engineer had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the municipality. In such event, adjustment of the price provided for in this subagreement shall be made as provided in paragraph (iv) of this clause.

(E) Remedies

Except as may be otherwise provided in this subagreement, all claims, counterclaims, disputes, and other matters in question between the municipality and the

engineer arising out of or relating to this subagreement or the breach thereof will be decided by arbitration, if the parties mutually agree, or in a court of competent jurisdiction within the district in which the municipality is located.

(F) Price Reduction for Defective Cost or Pricing Data (This clause is applicable if the amount of the agreement exceeds $100,000.)

The engineer warrants that cost and pricing data submitted for evaluation with respect to negotiation of prices for negotiated subagreements and lower tier subagreements is based on current, accurate, and complete data supported by books and records. If the municipality or Commissioner determines that any price, including profit, negotiated in connection with this subagreement, any lower tier subagreement, or any amendment thereunder was increased by any significant sums because the data provided was incomplete, inaccurate, or not current at the time of submission, then such price, cost or profit shall be reduced accordingly, and the subagreement shall be modified in writing to reflect such reduction.

(NOTE—Since the subagreement is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontractors, the engineer may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the engineer. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by lower tier subcontractors.)

(G) Audit; Access to Records

(i) The engineer shall maintain books, records, documents, and other evidence directly pertinent to performance on grant work under this agreement in accordance with generally accepted accounting principles and practices consistently applied. The engineer shall also maintain the financial information and data used by the engineer in the preparation or support of the cost submission required for any negotiated subagreement or change order in effect on the date of execution of this agreement and a copy of the cost summary shall be submitted to the municipality. The Commissioner or any of his duly authorized representatives shall have access to all such books, records, documents, and other evidence for inspection, audit, and copying during normal business hours. The engineer will provide proper facilities for such access and inspection.

(ii) The engineer agrees to include paragraphs (i) through (v) of this clause in all his contracts and all lower tier subcontracts directly related to project performance that are in excess of $10,000, and to make paragraphs (i) through (v) of this clause applicable to all change orders directly related to project performance.

(iii) Audits conducted under this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit agency(ies).

(iv) The engineer agrees to the disclosure of all information and reports resulting from access to records under paragraphs (i) and (ii) of this clause, to any of the agencies referred to in paragraph (i), provided that the engineer is afforded the opportunity for an audit exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report and that the final audit report will include written comments of reasonable length, if any, of the engineer.

(v) The engineer shall maintain and make available records under paragraphs (i) and (ii) of this clause during performance on grant funded work under this agreement and until 3 years from the date of final grant payment for the project. In addition,

those records which relate to any ''Dispute'' appeal under a grant agreement, to litigation, to the settlement of claims arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until 3 years after the date of resolution of such appeal, litigation, claim, or exception.

(H) Covenant Against Contingent Fees

The engineer warrants that no person or selling agency has been employed or retained to solicit or secure this subagreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the engineer for the purpose of securing business. For breach or violation of this warranty the municipality shall have the right to annul this agreement without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

(I) Gratuities

(i) If the municipality finds after a notice and hearing that the engineer, or any of the engineer's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise), to any official, employee, or agent of the municipality or the State, in an attempt to secure a subagreement of favorable treatment in awarding, amending, or making any determinations related to the performance of this agreement, the municipality may, by written notice to the engineer, terminate this agreement. The municipality may also pursue other rights and remedies that the law or this subagreement provides. However, the existence of the facts on which the municipality bases such findings shall be in issue and may be reviewed in proceedings under the Remedies clause of the agreement.

(ii) In the event this subagreement is terminated as provided in paragraph (i), the municipality may pursue the same remedies against the engineer as it could pursue in the event of a breach of the subagreement by the engineer and, as a penalty, in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the municipality) which shall be not less than three nor more than ten times the costs the engineer incurs in providing any such gratuities to any such officer or employee.

(J) Responsibility of the Engineer

(i) The engineer shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports, and other services furnished by the engineer under this subagreement. The engineer shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in his designs, drawings, specifications, reports, and other services.

(ii) The engineer shall perform the professional services necessary to accomplish the work required to be performed under this subagreement, in accordance with this subagreement and applicable requirements of the Commissioner in effect on the date of execution of the assistance agreement for this project.

(iii) Approval by the municipality or the Commissioner of drawings, designs, specifications, reports, and incidental work or materials furnished hereunder shall not in any way relieve the engineer of responsibility for the technical adequacy of his work. Neither the municipality's nor Commissioner's review, approval, acceptance, or payment for any of the services shall be construed as a waiver of any rights under this subagreement or of any cause of action arising out of the performance of this subagreement.

(iv) The engineer shall be and shall remain liable, in accordance with applicable law, for all damages to the municipality or the State caused by the engineer's negligent performance of any of the services furnished under this subagreement, except for errors, omissions, or other deficiencies to the extent attributable to the municipality, municipality-furnished data, or any third party. The engineer shall not be responsible for any time delays in the project caused by circumstances beyond the engineer's control.

(v) The engineer's obligations under this clause are in addition to the engineer's other expressed or implied warranties under this subagreement or State law and in no way diminish any other rights that the municipality may have against the engineer for faulty materials, equipment, or work.

(K) Payment

(i) Payment shall be made in accordance with the payment schedule incorporated in this subagreement as soon as practicable upon submission of statements requesting payment by the engineer to the municipality. If no such payment schedule is incorporated in this subagreement, the payment provisions of paragraph (ii) of this clause shall apply.

(ii) The engineer may request monthly progress payments and the municipality shall make them as soon as practicable upon submission of statements requesting payment by the engineer to the municipality. When such progress payments are made, the municipality may withhold up to ten (10) percent of the vouchered amount until satisfactory completion by the engineer of work and services within a step called for under this subagreement. When the municipality determines that the work under this subagreement or any specified task hereunder is substantially complete and that the amount of retained percentages is in excess of the amount considered by the municipality to be adequate for its protection, it shall release to the engineer such excess amount.

(iii) No payment request made under paragraph (i) or (ii) of this clause shall exceed the estimated amount and value of the work and services performed by the engineer under this subagreement. The engineer shall prepare the estimates of work performed and shall supplement them with such supporting data as the municipality may require.

(iv) Upon satisfactory completion of the work performed under this subagreement, as a condition precedent to final payment under this subagreement or to settlement upon termination of the subagreement, the engineer shall execute and deliver to the municipality a release of all claims against the municipality arising under or by virtue of this subagreement, other than such claims, if any, as may be specifically exempted by the engineer from the operation of the release in stated amounts to be set forth therein.

(L) Copyrights and Rights in Data

(i) The engineer agrees that any plans, drawings, designs, specifications, computer programs (which are substantially paid for with State grant funds), technical reports, operating manuals, and other work submitted with an engineering report, or with a design or construction grant application or which are specified to be delivered under this subagreement or which are developed or produced and paid for under this subagreement (referred to in this clause as ''Subject Data'') and including all raw data obtained or generated by the engineer during the course of his work under this subagreement are subject to certain rights in the United States. These rights include the right to use, duplicate, and disclose such subject data, in whole or in part, in any manner for any purpose whatsoever, and to have others do so. If the material

is copyrightable, the engineer may copyright it, subject to the rights of the State described herein, but the municipality and the State reserve a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, and use such materials, in whole or in part, and to authorize others to do so. The engineer shall include appropriate provisions to achieve the purpose of this condition in all subcontracts expected to produce copyrightable subject data.

(ii) All such subject data furnished by the engineer pursuant to this subagreement are instruments of his services in respect to the project. It is understood that the engineer does not represent such subject data to be suitable for reuse on any other project or for any other purpose. If the municipality reuses the subject data without the engineer's specific written verification or adaptation, such reuse will be at the risk of the municipality without liability to the engineer. Any such verification or adaptation will entitle the engineer to further compensation at rates agreed upon by the municipality and the engineer.

(e) **Required Provisions for Construction Contracts**

Municipalities must include, when appropriate, the following clauses or their equivalent in each subagreement and may substitute other terms for ''grantee'' and ''contractor'' in their subagreements:

(1) Supersession

The grantee and the contractor agree that the following general provisions or their equivalent apply to state grant eligible work to be performed under this contract and that these provisions supersede any conflicting provisions of this contract.

(2) Privity of contract

This contract is expected to be funded in part by the State of Connecticut. Neither the State, nor any of its departments, agencies, or employees is or will be a party to this contract or any lower tier subcontract. This contract is to be subject to regulations adopted in accordance with Section 22a-439 of the Connecticut General Statutes.

(3) Changes for contracts for construction:

(A) The municipality may, at any time, without notice to any surety, by written order designated or indicated to be a change order, make any change in the work within the general scope of the subagreement, including but not limited to changes:

(i) In the specifications (including drawings and designs);

(ii) In the time, method, or manner of performance of the work;

(iii) In the grantee-furnished facilities, equipment, materials, services, or site; or

(iv) Directing acceleration in the performance of the work.

(B) A change order shall also be any other written or oral order (including direction, instruction, interpretation or determination) from the municipality which causes any change, provided the contractor gives the municipality written notice stating the date, circumstances, and source of the order and that the contractor regards the order as a change order.

(C) Except as provided in this clause, no order, statement, or conduct of the municipality shall be treated as a change under this clause or entitle the contractor to an equitable adjustment.

(D) If any change under this clause causes an increase or decrease in the contractor's cost or the time required to perform any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the subagreement modified in writing. However, for claims based on defective specifications, no claim for any change under (B) above shall be allowed for any costs incurred more than 20 days before the contractor gives written notice as

required in paragraph (B). In the case of defective specifications for which the municipality is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the contractor in attempting to comply with those defective specifications.

(E) If the contractor intends to assert a claim for an equitable adjustment under this clause, he must, within thirty (30) days after receipt of a written change order under (A) of this change clause or the furnishing of a written notice under (B) of this clause, submit to the grantee a written statement setting forth the general nature and monetary extent of such claim. The municipality may extend the 30-day period. The statement of claim may be included in the notice under (B) of this clause.

(F) No claim by the contractor for an equitable adjustment shall be allowed if made after final payment under this contract.

(4) Changes for contracts for supplies.

(A) The municipality may at any time, by a written order and without notice to the sureties, make changes within the general scope of this subagreement in any one or more of the following:

(i) Drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the grantee;

(ii) Method of shipment or packing; and

(iii) Place of delivery.

(B) If any change causes an increase or decrease in the cost or the time required to perform any part of the work under this subagreement, whether or not changed by any such order, an equitable adjustment shall be made in the subagreement price or delivery schedule, or both, and the subagreement shall be modified in writing. Any claim by the contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the contractor of the notification change. If the municipality decides that the facts justify such action, the municipality may receive and act upon any such claim asserted at any time before final payment under this subagreement. Where the cost of property made obsolete or excess as a result of a change is included in the contractor's claim for adjustment, the grantee shall have the right to prescribe the manner of disposition of such property. Nothing in this clause shall excuse the contractor from proceeding with the subagreement as changed.

(5) Differing site conditions.

(A) The contractor shall promptly, and before such conditions are disturbed, notify the municipality in writing of:

(i) Subsurface or latent physicial conditions at the site differing materially from those indicated in this subagreement, or

(ii) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this subagreement. The municipality shall promptly investigate the conditions and, if it finds that conditions are materially different and will cause an increase or decrease in the contractor's cost or the time required to perform any part of the work under this subagreement, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the subagreement modified in writing.

(B) No claim of the contractor under this clause shall be allowed unless the contractor has given notice required in (A) of this clause. However, the municipality may extend the prescribed time.

(C) No claim by the contractor for an equitable adjustment shall be allowed if asserted after final payment under this subagreement.

(6) Suspension of work

(A) The municipality may order the Contractor, in writing to suspend, delay, or interrupt all or any part of the work for such period of time as the municipality may determine to be appropriate for the convenience of the municipality.

(B) If the performance of all or any part of the work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the municipality in administration of the contract, (or if no time is specified, within a reasonable time), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the contractor, or for which an equitable adjustment is provided for or excluded under any other provision of the contract.

(C) No claim under this clause shall be allowed for any costs incurred more than 20 days before the contractor notified the municipality in writing of the act or failure to act involved (this requirement does not apply to a claim resulting from a suspension order), and unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the contract.

(7) Termination

(A) This contract may be terminated in whole or in part in writing by either party in the event of substantial failure by the party to fulfill its obligations under this subagreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(B) This contract may be terminated in whole or in part in writing by the municipality for its convenience, provided that the contractor is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(C) If termination for default is effected by the municipality, an equitable adjustment in the price provided for in this contract shall be made but no amount shall be allowed for anticipated profit on unperformed services or other work, and any payment due to the contractor at the time of termination may be adjusted to cover any additional costs to the municipality because of the contractor's default. If termination for default is effected by the contractor, or if termination for convenience is effected by the municipality, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to the contractor for services rendered and expenses incurred prior to the termination in addition to termination settlement costs reasonably incurred by the contractor relating to commitments which had become firm prior to the termination.

(D) Upon receipt of a termination action pursuant to (A) or (B) above, the contractor shall promptly discontinue all services affected (unless the notice directs otherwise), and deliver or otherwise make available to the recipient all data, drawings, specifications, reports, estimates, summaries and such other information and materi-

als as may have been accumulated by the contractor in performing this contract whether completed or in process.

(E) Upon termination under (A) or (B) of this clause the municipality may take over the work and may award another party a contract to complete the work under this contract.

(F) If, after termination for failure of the contractor to fulfill contractual obligations, it is determined that the contractor had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the municipality. In such event, adjustment of the price provided for in this contract shall be made as provided in (C) of this clause.

(8) Remedies.

Except as may be otherwise provided in this contract, all claims, counter-claims, disputes, and other matters in question between the municipality and the contractor arising out of or relating to this contract or the breach thereof will be decided by arbitration if the parties mutually agree or in a court of competent jurisdiction within the district in which the municipality is located.

(9) Price reduction for defective cost or pricing data.

(NOTE—This clause is applicable to any contract negotiated between the municipality and its contractor in excess of $500,000; negotiated change orders in excess of $500,000 or 10 percent of the contract, whichever is less, affecting the price of a formally advertised, competitively awarded, fixed price contract; or any lower tier subcontract or purchase order in excess of $500,000 or 10 percent of the assistance agreement, whichever is less, under a contract other than a formally advertised, competitively awarded, fixed price subagreement. This clause is not applicable for contracts to the extent that they are awarded on the basis of effective price competition.)

The contractor and subcontractor, where appropriate, warrant that cost and pricing data submitted for evaluation with respect to negotiation of prices for negotiated contracts, lower tier subcontracts and change orders is based on current, accurate, and complete data supported by their books and records. If the municipality or the Commissioner determines that any price (including profit) negotiated in connection with this contract, any lower tier subcontract, or any amendment thereunder was increased by any significant sums because the data provided was incomplete, inaccurate, or not current at the time of submission, then such price, cost or profit shall be reduced accordingly, and the contract shall be modified in writing to reflect such reduction.

(NOTE—Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with lower tier subcontracts, the contractor may wish to include a clause in each lower tier subcontract requiring the lower tier subcontractor to appropriately indemnify the contractor. It is also expected that any lower tier subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by lower tier contractors.)

(10) Audit; Access to records.

(A) The contractor shall maintain books, records, documents, and other evidence directly pertinent to performance on grant work under this contract in accordance with generally accepted accounting principles and practices consistently applied. The contractor shall also maintain the financial information and data used by the contractor in the preparation or support of the cost submission required under Section 22a-439-4 (g) (6) for any negotiated contract or change order and a copy of the

cost summary submitted to the municipality. The municipality and the Commissioner or any of his authorized representatives shall have access to all such books, records, documents, and other evidence for the purpose of inspection, audit and copying during normal business hours. The contractor will provide proper facilities for such access and inspection.

(B) If this is a formally advertised, competitively awarded, fixed price contract, the contractor agrees to make (A) through (F) of this clause applicable to all negotiated change orders and contract amendments affecting the contract price. In the case of all other types of prime contracts, the contractor agrees to include (A) through (F) of this clause in all his subcontracts in excess of $10,000 and to make paragraphs (A) through (F) of this clause applicable to all change orders directly related to project performance.

(C) Audits conducted under this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit agency(ies).

(D) The contractor agrees to disclose all information and reports resulting from access to records under (A) and (B) of this clause to any of the agencies referred to in (A).

(E) Records under (A) and (B) above shall be maintained and made available during performance on assisted work under this contract and until three years from the date of final State payment for the project. In addition, those records which relate to any dispute appeal arising under a grant assistance agreement, to litigation, to the settlement of claims arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim, or exception.

(F) This right of access clause (with respect to financial records) applies to:

(i) Negotiated prime subagreements;

(ii) Negotiated change orders or contract amendments in excess of $10,000 affecting the price of any formally advertised, competitively awarded, fixed price contract, and

(iii) Subcontracts or purchase orders under any contract other than a formally advertised, competitively awarded, fixed price contract. However, this right of access does not apply to a prime contract, lower tier subcontract, or purchase order awarded after effective price competition, except with respect to records pertaining directly to contract performance, (excluding any financial records of the contractor); if there is any indication that fraud, gross abuse, or corrupt practices may be involved or if the contract is terminated for default or for convenience.

(11) Covenant against contingent fees.

The contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the contractor for the purpose of securing business. For breach or violation of this warranty the grantee shall have the right to annul this agreement without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

(12) Gratuities.

(A) If the municipality finds, after a notice and hearing, that the contractor, or any of the contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise, to any official, employee, or agent of the

municipality or the State, in an attempt to secure a contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this agreement, the municipality may, by written notice to the contractor, terminate this agreement.The municipality may also pursue other rights and remedies that the law or this agreement provides. However, the existence of the facts on which the municipality bases such findings shall be in issue and may be reviewed in proceedings under the Remedies clause of this agreement.

(B) In the event this contract is terminated, as provided in (A) in this clause, the recipient may pursue the same remedies against the contractor as it could pursue in the event of a breach of the contract by the contractor and, as a penalty, in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the grantee) which shall be not less than three nor more than ten times the costs the contractor incurs in providing any such gratuities to any such officer or employee.

(13) Responsibility of the contractor.

(A) The contractor agrees to perform all work under this agreement in accordance with this agreement's designs, drawings, and specifications.

(B) The contractor warrants and guarantees for a period of one (1) year from the date of substantial completion of the system that the completed system is free from all defects due to faulty materials, equipment or workmanship; and the contractor shall promptly make whatever adjustments or corrections necessary to cure such defects, including repairs of any damage to other parts of the system resulting from such defects. The municipality shall give notice to the contractor of observed defects with reasonable promptness. In the event that the contractor fails to make adjustments, repairs, corrections or other work that may be made necessary by such defect, the municipality may do so and charge the contractor the cost incurred. The performance bond shall remain in full force and effect through the guarantee period.

(C) The contractor's obligations under this clause are in addition to the contractor's other express or applied warranties under this agreement or State law and in no way diminish any other rights that the municipality may have against the contractor for faulty material, equipment, or work.

(14) Final payment.

Upon satisfactory completion of the work performed under this agreement, as a condition before final payment under this agreement, or as a termination settlement under this agreement, the contractor shall execute and deliver to the municipality a release of all claims against the municipality arising under or by virtue of this agreement, except claims which are specifically exempted by the contractor to be set forth therein. Unless otherwise provided in this agreement or by State law or otherwise expressly agreed to by the parties to this agreement, final payment under this agreement or settlement upon termination of this agreement shall not constitute a waiver of the municipality's claims against the contractor or his sureties under this agreement or applicable performance and payment bonds.

(f) **Procurement Requirements—General**

(1) Applicability.

This defines the responsibilities of the State and the municipality and the minimum procurement standards for each municipality's procurement system.

(2) Municipality responsibility.

(A) The municipality is responsible for the settlement and satisfactory completion in accordance with sound business judgment and good administrative practice of all contractual and administrative issues arising out of subagreements entered into

under the assistance agreement. This includes issuance of invitations for bids or requests for proposals, selection of contractors, award of subagreements, settlement of protests, claims, disputes and other related procurement matters.

(B) The municipality shall maintain a subagreement administration system to assure that contractors perform in accordance with the terms, conditions and specifications of their subagreements.

(C) The municipality shall review its proposed procurement actions to avoid purchasing unnecessary or duplicative items.

(D) The municipality shall consider consolidating its procurement or dividing it into parts to obtain a more economical purchase.

(E) Where appropriate, the municipality shall make an analysis of lease versus purchase alternatives in its procurement actions.

(F) A municipality may request technical assistance from the Commissioner for the administration and enforcement of any subagreement awarded under this section. However, such assistance does not relieve the municipality of its responsibilities under this section.

(G) A municipality may use innovative procurement methods or procedures only if it receives the Commissioner's prior written approval.

(3) Municipality reporting requirements.

The municipality shall request, in writing, the Commissioner's authorization to award each construction subagreement which has an aggregate value over $10,000. The request shall include:

(A) Name, address, telephone number and employee identification number of the construction contractor,

(B) Amount of the award,

(C) Estimated starting and completion dates,

(D) Project number, name and site location of the project, and

(E) Copy of the tabulations of bids or offers and the name of each bidder or offeror.

(4) Copies of contract documents.

The municipality must promptly submit to the Commissioner copies of any prime contract or modification thereof, and revisions to plans and specifications.

(5) Limitations on subagreement award.

(A) The municipality shall award subagreements only to responsible contractors that possess the potential ability to perform successfully under the terms and conditions of a proposed procurement. A responsible contractor is one that has:

(i) Financial resources, technical qualifications, experience, an organization and facilities adequate to carry out the project, or a demonstrated ability to obtain these.

(ii) Resources to meet the completion schedule contained in the subagreement.

(iii) A satisfactory performance record for completion of subagreements.

(iv) Accounting and auditing procedures adequate to control property, funds and assets.

(v) Demonstrated compliance or willingness to comply with the civil rights, equal employment opportunity, labor laws and other statutory requirements.

(B) The municipality shall not make awards to contractors who have been suspended or debarred by Connecticut State Agencies.

The municipality shall refer violations of law to the local or State officials having the proper jurisdiction.

(7) Competition.

(A) The municipality shall conduct all procurement transactions in a manner that provides maximum open and free competition.

(B) Procurement practices shall not unduly restrict or eliminate competition. Examples of practices considered to be unduly restrictive include:

(i) Noncompetitive practices between firms.

(ii) Organizational conflicts of interest.

(iii) Unnecessary, experience and bonding requirements.

(iv) Local laws, ordinances, regulations or procedures which give local bidders or proposers preference over other bidders or proposers in evaluating bids or proposals.

(v) Placing unreasonable requirements on firms in order for them to qualify to do business.

(C) The municipality may use a prequalification list(s) of persons, firms or products if it:

(i) Updates its prequalified list(s) at least every six months.

(ii) Reviews and acts on each request for prequalification made more than thirty (30) days before the closing date for receipt of proposals or bid opening.

(iii) Gives adequate public notice of its prequalification procedures in accordance with the public notice procedures.

(D) A municipality may not use a prequalified list(s) of persons or firms if the procedure unnecessarily restricts competition.

(8) Profit.

(A) Municipalities must assure that only fair and reasonable profits are paid to contractors awarded subagreements under State assistance agreements.

(B) The municipality shall negotiate profit as a separate element of price for each subagreement in which there is no price competition, or where price is based on cost analysis.

(C) Where the grantee receives two or more bids, profit included in a formally advertised, competitively bid, fixed price subagreement shall be considered reasonable.

(D) Off-the-shelf or catalog supplies are exempt from this section.

(9) Use of small, minority, and women's businesses.

The municipality must take affirmative steps to assure that small, minority, and women's business are used whenever possible.

(10) Privity of subagreement.

The State shall not be a party to any subagreement nor to any solicitation or request for proposals.

(11) Documentation.

(A) Procurement records and files for procurements in excess of $10,000 shall include the following:

(i) Basis for contractor selection.

(ii) Written justification for selection of the procurement method.

(iii) Written justification for use of any specification which does not provide for maximum free and open competition.

(iv) Written justification for the type of subagreement.

(v) Basis for award cost or price, including a copy of the cost or price analysis made and documentation of negotiations.

(vi) A municipality must state the reasons in writing for rejecting any or all bids and the justification for procurements on a noncompetitively negotiated basis and make them available for public inspection.

(12) Specifications

(A) Nonrestrictive specifications.

(i) No specification for bids or statement of work in connection with such works shall be written in such a manner as to contain proprietary, exclusionary or discriminatory requirements other than those based upon performance, unless such requirements are necessary to test or demonstrate a specific thing or to provide for necessary interchangeability of parts and equipment, or at least one brand name or trade name of comparable quality or utility is listed and is followed by the words ''or equal.'' If brand or trade names are specified, the municipality must be prepared to identify to the Commissioner, or in any protest action, the salient requirements (relating to the minimum needs of the project) which must be met by any offeror. The single base bid method of solicitation for equipment and parts for determination of a low, responsive bidder may not be utilized. With regard to materials, if a single material is specified, the municipality must be prepared to substantiate the basis for the selection of the material.

(ii) Project specifications shall, to the extent practicable, provide for maximum use of structures, machines, products, materials, construction methods, and equipment which are readily available through competitive procurement, or through standard or proven production techniques, methods, and processes.

(B) Sole source restriction. A specification shall not require the use of structures, materials, equipment, or processes which are known to be available only from a sole source, unless the Commissioner determines that the municipality's engineer has adequately justified in writing that the proposed use meets the particular project's minimum needs or the Commissioner determines that use of a single source is necessary to promote innovation.

(C) Experience clause restriction. The general use of experience clauses requiring equipment manufacturers to have a record of satisfactory operation for a specified period of time or of bonds or deposits to guarantee replacement in the event of failure is restricted to special cases where the municipality's engineer adequately justifies any such requirement in writing. Where such justification has been made, submission of a bond or deposit shall be permitted instead of a specified experience period. The period of time for which the bond or deposit is required should not exceed the experience period specified.

(13) Force account work.

(A) The municipality must receive the Commissioner's prior written approval for use of the force account method for any planning, design work or construction work unless the grant agreement stipulates the force account method.

(B) The Commissioner may approve the force account method upon the municipality's demonstration that it possesses the necessary competence required to accomplish such work and that the work can be accomplished more economically by use of the force account method, or emergency circumstances dictate its use.

(C) Use of the force account method for construction work shall generally be limited to minor portions of a project.

(14) Code of conduct.

(A) The municipality shall maintain a written code or standards of conduct which shall govern the performance of its officers, employees, or agents engaged in the award and administration of subagreements supported by State funds. No employee, officer or agent of the municipality shall participate in the selection, award or administration of a subagreement supported by State funds if a conflict of interest, real or apparent, would be involved.

(B) Such a conflict would arise when:

(i) Any employee, officer or agent of the municipality, any member of the immediate families, or their partners, have a financial or other interest in the firm selected for award.

(ii) An organization which may receive or has been awarded a subagreement employs, or is about to employ, any person under (B) (i) of this Section.

(C) The municipality's officers, employees or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors or other parties to subagreements.

(D) Municipalities may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal value.

(E) To the extent permitted by State or local law or regulations, the municipality's code of conduct shall provide for penalties, sanctions or other disciplinary actions for violations of the code by the municipality's officers, employees or agents or by contractors or their agents.

(15) Payment to consultants.

(A) For all State assistance agreements, the State will limit its participation in the salary rate (excluding overhead) paid to individual consultants retained by a municipality or by a municipality's contractors or subcontractors to the maximum daily rate for a GS-18 federal employee. (Municipalities may, however, pay contractors and subcontractors more than this amount.) This limitation applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. The rate does not include transportation and subsistence costs for travel performed; municipalities will pay these in accordance with their normal travel reimbursement practices.

(B) Subagreements with firms for services which are awarded using these procurement requirements are not affected by this limitation.

(16) Cost and price considerations.

(A) The municipality shall conduct a cost analysis of all negotiated change orders and all negotiated subagreements estimated to exceed $10,000.

(B) The municipality shall conduct a price analysis of all formally advertised procurements estimated to exceed $10,000 if there are fewer than three bidders.

(C) For negotiated procurement, contractors and subcontractors shall submit cost or pricing data in support of their proposals to the municipality.

(17) Small purchases.

(A) Small Purchase Procurement.

If the aggregate amount involved in any one procurement transaction does not exceed $10,000 including estimated handling and freight charges, overhead and profit, the municipality may use small purchase procedures.

(B) Small Purchase Procedures.

Small purchase procedures are relatively simple procurement methods that are sound and appropriate for procurement of services, supplies or other property costing in the aggregate not more than $10,000.

(C) Requirements for Competition.

(i) Municipalities shall not divide a procurement into smaller parts to avoid the dollar limitation for competitive procurement.

(ii) Municipalities shall obtain price or rate quotations from an adequate number of qualified sources.

(18) Negotiation and award of subagreements.

(A) Unless the request for proposals states that award may be based on initial offers alone, the municipality must conduct meaningful negotiations with the best

qualified offerors with acceptable proposals within the competitive range, and permit revisions to obtain best and final offers. The best qualified offerors must have equal opportunities to negotiate or revise their proposals. During negotiations, the municipality must not disclose the identity of competing offerors or any information from competing proposals.

(B) The municipality must award the subagreement to the responsible offeror whose proposal is determined in writing to be the most advantageous to the municipality, taking into consideration price and other evaluation criteria set forth in the request for proposals.

(C) The municipality must promptly notify unsuccessful offerors that their proposals were rejected.

(D) The municipality must document its procurement file to indicate how proposals were evaluated, what factors were used to determine the best qualified offerors within the competitive range, and what factors were used to determine the subagreement award.

(19) Optional selection procedure for negotiation and award of subagreement for architectural and engineering services.

(A) The municipality may evaluate and select an architect or engineer using the procedures in this subdivision in place of the procedures in ''Negotiation and award of subagreements'' in subdivision (18).

(B) The municipality may use responses from requests for statement of qualifications to determine the most technically qualified architects or engineers.

(C) After selecting and ranking the most qualified architects or engineers, the municipality will request technical proposals from those architects or engineers and inform them of the evaluation criteria the municipality will use to rank the proposals.

(D) The municipality shall then select and determine, in writing, the best technical proposal.

(E) After selecting the best proposal, the municipality shall attempt to negotiate fair and reasonable compensation with that offeror.

(F) If the municipality and the offeror of the best proposal cannot agree on the amount of compensation, the municipality shall formally terminate negotiations with that offeror. The municipality shall then negotiate with the offeror with the next best proposal. This process will continue until the municipality reaches agreement on compensation with an offeror with an acceptable proposal. Once the municipality terminates negotiations with an offeror, the municipality cannot go back and renegotiate with that offeror.

(20) Noncompetitive negotiation procurement method.

Noncompetitive negotiation may be used only when the award of a subagreement is not feasible under small purchase, formal advertising, or competitive negotiation procedures. The grantee may award a noncompetitively negotiated subagreement only under the following circumstances:

(A) The item is available only from a single source;

(B) A public exigency or emergency exists and the urgency for the requirement will not permit a delay incident to competitive procurement;

(C) After solicitation from a number of sources, competition is determined to be inadequate.

(21) Use of the same architect or engineer during construction.

(A) If the municipality is satisfied with the qualifications and performance of the architect or engineer who provided any or all of the planning or design services for the project, it may wish to retain that firm or individual during construction of

the project. The municipality may do so without further public notice and evaluation of qualifications provided that it received a planning or design grant and selected the architect or engineer in accordance with these procurement regulations.

(B) However, if the municipality uses the procedures in (A) to retain an architect or engineer, any construction subagreements between the architect or engineer and the municipality must meet the procurement provisions of Section 22a-439-4 (g) (5).

(22) Negotiation of subagreements.

(A) Formal advertising, with adequate purchase descriptions, sealed bids, and public openings shall be the required method of procurement unless negotiation under (B) of this section is necessary to accomplish sound procurement.

(B) All negotiated procurement shall be conducted in a manner to provide to the maximum practicable extent open and free competition appropriate to the type of project work to be performed. The municipality is authorized to negotiate subagreements if any of the following conditions exist:

(i) Public exigency will not permit the delay incident to formally advertised procurement (e.g. an emergency procurement).

(ii) The aggregate amount involved does not exceed $10,000.

(iii) The material or service to be procured is available from only one person or entity. If the procurement is expected to aggregate more than $10,000, the municipality must document its file with a justification of the need for noncompetitive procurement, and provide such documentation to the Commissioner on request.

(iv) The procurement is for personal or professional services (including architectural or engineering services) or for any service that a university or other educational institution may render.

(v) No responsive, responsible bids at acceptable price levels have been received after formal advertising, and the Commissioner's prior written approval has been obtained.

(vi) The procurement is for materials or services where the price is established by law.

(vii) The procurement is for technical items or equipment requiring standardization and interchangeability of parts with existing equipment.

(viii) The procurement is for experimental, developmental or research services.

(23) Enforcement.

If the Commissioner determines that the municipality has failed to comply with any of these procurement provisions, he may impose any of the following sanctions:

(A) The grant may be terminated or annulled under Section 22a-439-4 (s).

(B) Project costs directly related to the noncompliance may be disallowed.

(C) Payment otherwise due to the municipality of up to 10 percent may be withheld.

(D) Project work may be suspended under Sec. 22a-439-4 (e) (6).

(E) A noncomplying municipality may be found nonresponsible or ineligible for future state funding assistance or a noncomplying contractor may be found nonresponsible or ineligible for approval for future contract award under state grants.

(F) An injunction may be entered or other equitable relief afforded by a court of appropriate jurisdiction.

(G) Such other administrative or judicial action may be instituted if it is legally available and appropriate.

(24) Contract Enforcement.

(A) Commissioner authority. At the request of a municipality, the Commissioner is authorized to provide technical and legal assistance in the administration and

enforcement of any contract related to pollution abatement facilities for which a State grant was made and to intervene in any civil action involving the enforcement of such contracts, including contract disputes which are the subject of either arbitration or court action in accordance with the requirements of Section 22a-439-4 (d) (1).

(g) **Architectural/Engineering Procurement Requirements.**

(1) Type of Contract (Subagreement).

(A) General. Cost-plus-percentage-of-cost and percentage-of-construction-cost contracts are prohibited. Cost reimbursement, fixed price, or per diem contracts or combinations of these may be negotiated for architectural or engineering services. A fixed price contract is generally used only when the scope and extent of work to be performed is clearly defined. In most other cases, a cost reimbursement type of contract is more appropriate. A per diem contract may be used if no other type of contract is appropriate. An incentive fee may be used if the municipality submits an adequate independent cost estimate and price comparison.

(B) Cost reimbursement contract. Each cost reimbursement contract must clearly establish a cost ceiling which the engineer may not exceed without formally amending the contract and a fixed dollar profit which may not be increased except in the case of a contract amendment to increase the scope of work.

(C) Fixed price contract. An acceptable fixed price contract is one which establishes a guaranteed maximum price which may not be increased unless a contract amendment increases the scope of work.

(D) Compensation procedures. If, under either a cost reimbursement or fixed price contract, the municipality desires to use a multiplier type of compensation, all of the following must apply:

(i) The multiplier and the portions of the multiplier allocable to overhead and allocable to profit have been specifically negotiated.

(ii) The portion of the multiplier allocable to overhead includes only allowable items of cost under the cost principles.

(iii) The portions of the multiplier allocable to profit and allocable to overhead have been separately identified in the contract.

(iv) The fixed price contract includes a guaranteed maximum price for completion of the specifically defined scope of work; and the cost reimbursement contract includes a fixed dollar profit which may not be increased except in the case of a contract amendment which increases the scope of work.

(E) Per diem contracts. A per diem agreement may be utilized only after a determination that a fixed price or cost reimbursement type contract is not appropriate. Per diem agreements should be used only to a limited extent, e.g., where the first task under a planning grant involves establishing the scope and cost of succeeding planning tasks, or for incidental services such as expert testimony or intermittent professional or testing services. (Resident engineer and resident inspection services should generally be compensated at cost plus fixed fee). Cost and profit included in the per diem rate must be specifically negotiated and displayed separately in the engineer's proposal.

The contract must clearly establish a price ceiling which may not be exceeded without formally amending the contract.

(2) Public Notice. Adequate public notice must be given of the requirement for architectural or engineering services for all subagreements.

(A) Public announcement. A notice of request for qualifications should be published in professional journals, newspapers, or publications of general circulation over a reasonable area and, in addition, if desired, through posted public notices or

written notification directed to interested persons, firms, or professional organizations inviting the submission of statements of qualifications. The announcement must clearly state the deadline and place for submission of qualification statements.

(B) Exceptions. Public notice is not required under the following circumstances:

(i) For design or construction phases of a grant funded project if the municipality is satisfied with the qualifications and performance of any engineer who performed all or any part of the planning or design work and the engineer has the capacity to perform the subsequent steps.

(ii) The municipality desires the same engineer to provide architectural or engineering services for the subsequent steps or for subsequent segments of design work under one grant if a single pollution abatement facilities is segmented into two or more construction projects. If the design work is accordingly segmented so that the initial contract for preparation of construction drawings and specifications does not cover the entire pollution abatement facilities to be built under one grant and the municipality may use the same engineering firm that was selected for the initial segment of design work for subsequent segments.

(3) Evaluation of Qualifications.

(A) The municipality shall review the qualifications of firms which responded to the announcement or were on the prequalified list and shall uniformly evaluate the firms.

(B) Qualifications shall be evaluated through an objective process (e.g., the appointment of a board or committee which, to the extent practicable, should include persons with technical skills).

(C) Criteria which should be considered in the evaluation of candidates for submission of proposals should include:

(i) Specialized experience and technical competence of the candidate or firm and its personnel (including a joint venture, association or professional subcontractor) considering the type of services required and the complexity of the project.

(ii) Past record of performance on contracts with the municipality, other government agencies or public bodies, and with private industry, including such factors as control of costs, quality of work, and ability to meet schedules.

(iii) The candidate's capacity to perform the work (including any specialized services) within the time limitations, considering the firm's current and planned workload.

(iv) The candidate's familiarity with the types of problems applicable to the project.

(v) Avoidance of personal and organizational conflicts of interest.

(4) Solicitation and Evaluation of Proposals.

(A) Solicitation of Professional Services Proposals.

(i) Requests for professional services proposals must be sent to no fewer than three candidates who either responded to the public announcement or were selected from the prequalified list, unless, after good faith effort to solicit qualifications, fewer than three qualified candidates respond, in which case all qualified candidates must be provided request for proposals.

(ii) Requests for professional services proposals must be in writing and must contain the information necessary to enable a prospective offeror to prepare a proposal properly. The request for proposals must include a solicitation statement and must inform offerors of the evaluation criteria.

(iii) Submission deadline. Requests for proposals must clearly state the deadline and place for submission.

(B) Evaluation of Proposals.

(i) All proposals submitted in response to the request for professional services proposals must be uniformly evaluated. The municipality shall also evaluate the candidate's proposed method of accomplishing the work required.

(ii) Proposals shall be evaluated through an objective process (e.g., the appointment of a board or committee) which, to the extent practicable, should include persons with technical skills. Oral (including telephone) or written interviews should be conducted with top rated proposers, and information derived therefrom shall be treated on a confidential basis.

(iii) Municipalities must base their determinations of qualified offerors and acceptable proposals solely on the evaluation criteria stated in the request for proposals.

(5) Negotiation.

(A) Municipalities are responsible for negotiation of their contracts for architectural or engineering services. Contract procurement including negotiation may be performed by the municipality directly or by another person or firm retained for the purpose. Contract negotiations may include the services of technical, legal, audit, or other specialists to the extent appropriate.

(B) Negotiations may be conducted in accordance with State or local requirements, as long as they meet the minimum requirements as set forth in this section.

(C) The object of negotiations with any candidate shall be to reach agreement on the provisions of the proposed contract. The municipality and the candidate shall discuss, as a minimum:

(i) The scope and extent of work and other essential requirements.

(ii) Identification of the personnel and facilities necessary to accomplish the work within the required time including, where needed, employment of additional personnel, subcontracting, joint venture, etc.

(iii) Provisions of the required technical services in accordance with regulations and criteria established for the project.

(iv) A fair and reasonable price for the required work, to be determined in accordance with the cost and profit considerations.

(6) Cost and Price Considerations.

(A) The candidate(s) selected for negotiation shall submit to the municipality for review sufficient cost and pricing data to enable the municipality to ascertain the necessity and reasonableness of costs and amounts proposed and the allowability and eligibility of costs proposed.

(B) The municipality shall submit to the Commissioner for review:

(i) Documentation of the public notice of need for architectural or engineering services and selection procedures.

(ii) The cost and pricing data the selected engineer submitted.

(iii) A certification of review and acceptance of the selected engineer's cost and price.

(iv) A copy of the proposed subagreement.

(C) The Commissioner shall review the complete subagreement procurement procedure and approve the municipality's compliance with appropriate procedures before the municipality awards the subagreement.

(D) Cost review.

(i) The municipality shall review proposed subagreement costs.

(ii) As a minimum, proposed subagreement costs shall be presented on EPA form 5700-41 on which the selected engineer shall certify that the proposed costs

reflect complete, current, and accurate cost and pricing data applicable to the date of anticipated subagreement award.

(iii) In addition to the specific elements of cost, the estimated amount of profit shall be set forth separately in the cost summary for fixed price contracts and a maximum total dollar amount of profit shall be set forth separately in the cost summary for cost reimbursement contracts.

(iv) The municipality may require more detailed cost data than the form requires in order to substantiate the reasonableness of proposed subagreement costs. The Commissioner may require more detailed documentation only when the selected engineer is unable to certify that the cost and pricing data used are complete, current, and accurate. The state may on a selected basis, perform a pre-award cost analysis on any subagreement. A provisional overhead rate should be agreed upon before contract award.

(v) The engineer shall have an accounting system which accounts for costs in accordance with generally accepted accounting principles. This system shall provide for the identification, accumulation, and segregation of allowable and unallowable project costs among projects. Allowable project costs shall be determined by the Commissioner. The engineer must propose and account for costs in a manner consistent with his normal accounting procedures.

(vi) Subagreements awarded on the basis of a review of a cost element summary and a certification of complete, current, and accurate cost and pricing data shall be subject to downward renegotiation or recoupment of funds where the Commissioner determines that such certification was not based on complete, current, and accurate cost and pricing data or was not based on allowable costs at the time of award.

(7) Profit.

The objective of negotiations shall be the exercise of sound judgment and good administrative practice including the determination of a fair and reasonable profit based on the firm's assumption of risk and input to total performance and not merely the application of a predetermined percentage factor. For the purpose of subagreements under State grants, profit is defined as the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price. (This definition of profit may vary from the firm's definition of profit for other purposes.) Profit on a subagreement and each amendment to a subagreement under a grant should be sufficient to attract engineers who possess the talent and skills necessary for the accomplishment of project objectives, and to stimulate efficient and expeditious completion of the project. Where cost review is performed, the municipality should review the estimate of profit as it reviews all other elements of price.

(8) Award of Subagreement.

The municipality shall obtain the written approval of the Commissioner prior to the award of any subagreement or amendment.

(B) The municipality shall promptly notify unsuccessful candidates.

(9) Required Solicitation and Subagreement Provisions.

(A) Required solicitation statement. Requests for qualifications or proposals must include the following statement, as well as the proposed terms of the subagreement.

Any contract awarded under this request for (qualifications/professional proposals) is expected to be funded in part by a grant from the State of Connecticut, Department of Environmental Protection. This procurement will be subject to requirements contained in Section 22a-439 4 (f), (g), and (m) of the Regulations of Connecticut State Agencies. The State of Connecticut will not be a party to this request for (qualifications/professional proposals) or any resulting contract.

(B) Content of subagreement. Each subagreement must adequately define the scope and extent of project work; the time for performance and completion of the contract work including, where appropriate, dates for completion of significant project tasks; personnel and facilities necessary to accomplish the work within the required time; the extent of subcontracting and consultant agreements; and payment provisions. If any of these elements cannot be defined adequately for later tasks or steps at the time of contract execution, the contract should not include the subsequent tasks or steps at that time.

(10) Subagreement Payments-Architectural or Engineering Services.

The municipality shall make payment to the engineer in accordance with the payment schedule incorporated in the engineering agreement. Any retainage is at the option of the municipality. No payment request made by the engineer under the agreement may exceed the estimated amount and value of the work and services performed.

(11) Subcontracts under Subagreements for Architectural or Engineering Services.

Neither award and execution of subcontracts under a prime contract for architectural or engineering services nor the procurement and negotiation procedures used by the engineer in awarding such subcontracts are required to comply with any of the provisions, selection procedures, policies or principles set forth herein.

(h) **Construction Contract Procurement Requirements.**

(This section applies to construction contracts in excess of $10,000 awarded by municipalities for any construction projects.)

(1) Type of Contract.

Each contract shall be a fixed price (lump sum or unit price or a combination of the two) contract, unless the Commissioner gives advance written approval for the municipality to use some other acceptable type of contract. The cost-plus-percentage-of-cost contract shall not be used in any event.

(2) Formal Advertising.

Each contract shall be awarded after formal advertising, unless negotiations are permitted in accordance with Sec. 22a-439-4 (f) (18). Formal advertising shall be in accordance with the following:

(A) Adequate public notice. The municipality will cause adequate notice to be given of the solicitation by publication in newspapers or journals of general circulation beyond the municipality's locality (statewide, generally), inviting bids on the project work and stating the method by which bidding documents may be obtained or examined. Where the estimated cost of construction is $10 million or more, the municipality should publish the notice in trade journals of nationwide distribution. The municipality may solicit bids directly from bidders if it maintains a bidders list.

(B) Adequate time for preparing bids. Adequate time, generally not less than 30 days, must be allowed between the date when public notice is first published and the date by which bids must be submitted. Bidding documents (including specifications and drawings) shall be available to prospective bidders from the date when such notice is first published.

(C) Adequate bidding documents. The municipality shall prepare a reasonable number of bidding documents (invitations for bids) and shall furnish them upon request on a first-come, first-served basis. The municipality shall maintain a complete set of bidding documents and shall make them available for inspection and copying by any party. The bidding documents shall include:

(i) A complete statement of the work to be performed, including necessary drawings and specifications, and the required completion schedule.

(ii) The terms and conditions of the contract to be awarded.

(iii) A clear explanation of the method of bidding and the method of evaluation of bid prices, and the basis and method for award of the contract.

(iv) Responsibility requirements or criteria which will be employed in evaluating bidders.

(v) The following statement:

Any contract or contracts awarded under this invitation for bids are expected to be funded in part by a grant from the State of Connecticut (Department of Environmental Protection). Neither the State of Connecticut nor any of its departments, agencies or employees is or will be a party to this invitation for bids or any resulting contract. This procurement will be subject to the requirements contained in Section 22a-439-4 (f), (h), and (m) of the Regulations of Connecticut State Agencies.

(vi) A copy of Sec. 22a-439-4 (f), (h), and (m).

(vii) The prevailing State Wage Determination as applicable.

(D) Sealed bids. The municipality shall provide for bidding by sealed bid and for the safeguarding of bids received until public opening.

(E) Addenda to bidding documents. If a municipality desires to amend any part of the bidding documents (including drawings and specifications) during the period when bids are being prepared, the addenda shall be communicated in writing to all firms which have obtained bidding documents at least five (5) working days prior to the bid opening.

(F) Bid modifications. A firm which has submitted a bid shall be allowed to modify or withdraw its bid before the time of bid opening.

(G) Public opening of bids. The municipality shall provide for a public opening of bids at the place, date and time announced in the bidding documents.

(H) Award to the low, responsive, responsible bidder.

(i) After bids are opened, the municipality shall evaluate them in accordance with the methods and criteria set forth in the bidding documents.

(ii) The municipality may reserve the right to reject all bids. Unless all bids are rejected for good cause, award shall be made to the low, responsive, responsible bidder.

(iii) If the municipality intends to make the award to a firm which did not submit the lowest bid, it shall prepare a written statement before any award, explaining why each lower bidder was deemed nonresponsible or nonresponsive. The Municipality shall retain such statement in its files and forward a copy to the Commissioner for review.

(iv) Local laws, ordinances, regulations or procedures which are designed or which operate to give local bidders preference over other bidders shall not be employed in evaluating bids.

(v) If an unresolved procurement review issue or a protest relates only to award of a subcontract or procurement of an item under the prime contract, and resolution of that issue or protest is unduly delaying performance of the prime contract, the Commissioner may authorize award and performance of the prime contract before resolution of the issue or protest, if the Commissioner determines that resolution of the protest will not affect the placement of the prime contract bidders and will not materially affect initial performance of the prime contract; and that award of the prime contract is in the State's best interest, will not materially affect resolution of the protest, and is not barred by State or local law.

(vi) The municipality shall not reject a bid as nonresponsive for failure to list or otherwise indicate the selection of a subcontractor(s) or equipment, unless the municipality has unambiguously stated in the solicitation documents that such failure to list shall render a bid nonresponsive and shall cause rejection of a bid.

(i) **Negotiation of Contract Amendments (Change Orders).**

(1) Grantees are responsible for the negotiation of construction contract changes orders. This function may be performed by the grantee directly or, if authorized, by his engineer. During negotiations with the contractor the grantee shall:

(A) Make certain that the contractor has a clear understanding of the scope and extent of work and other essential requirements.

(B) Assure that the contractor demonstrates that he will make available or will obtain the necessary personnel, equipment and materials to accomplish the work within the required time.

(C) Assure a fair and reasonable price for the required work.

(2) The contract price or time may be changed only by a change order. When negotiations are required, they shall be conducted in accordance with (C) or (D) of this section, as appropriate. The value of any work covered by a change order or of any claim for increase or decrease in the contract price shall be determined by the method set forth in paragraphs (2) (A) through (2) (C) of this section, whichever is most advantageous to the municipality.

(A) Unit prices.

(i) Original bid items. Unit prices previously approved are acceptable for pricing changes of original bid items. However, when changes in quantities exceed 15 percent of the original bid quantity and the total dollar change of that bid item is significant, the municipality shall review the unit price to determine if a new unit price should be negotiated.

(ii) New items. Unit prices of new items shall be negotiated.

(B) A lump sum to be negotiated.

(C) Cost reimbursement. The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work plus an amount to be agreed upon to cover the cost of general overhead and profit to be negotiated.

(3) For each change order not in excess of $100,000 the contractor shall submit sufficient cost and pricing data to the municipality to enable the municipality to determine the necessity and reasonableness of costs and amounts proposed, and the allowability and eligibility of costs proposed.

(4) For each change order in excess of $100,000, the contractor shall submit to the municipality for review sufficient cost and pricing data as described in paragraphs (4) (A) through (4) (E) of this section to enable the municipality to ascertain the necessity and reasonableness of costs and amounts proposed, and the allowability and eligibility of costs proposed.

(A) The contractor shall certify that proposed costs reflect complete, current, and accurate cost and pricing data applicable to the date of the change order.

(B) In addition to the specific elements of cost, the estimated amount of profit shall be set forth separately in the cost summary for fixed price change orders and a specific total dollar amount of profit will be set forth separately in the cost summary for cost reimbursement change orders.

(C) The municipality may require more detailed cost data in order to substantiate the reasonableness of proposed change order costs. The Commissioner may, on a selected basis, perform a detailed cost analysis on any change order.

(D) For costs under cost reimbursement change orders, the contractor shall have an accounting system which accounts for such costs in accordance with generally accepted accounting principles. This system shall provide for the identification, accumulation and segregation of allowable and unallowable change orders. Allowable change order costs shall be determined in accordance with Sections 22a-439-4 (a), (b) and (c). The contractor must propose and account for such costs in a manner consistent with his normal accounting procedures.

(E) Change orders awarded on the basis of review of a cost element summary and a certification of complete, current, and accurate cost and pricing data shall be subject to downward renegotiation and recoupment of funds where a subsequent audit substantiates that such certification was not based on complete, current and accurate cost and pricing data.

(5) Review by Commissioner. The municipality shall submit, before the execution of any change order in excess of $100,000, to the Commissioner for review and approval:

(A) The cost and pricing data the contractor submitted.

(B) A certification of review and acceptance of the contractor's cost or price.

(C) A copy of the proposed change order.

(6) Profit. The objective of negotiations shall be the exercise of sound business judgment and good administrative practice including the determination of a fair and reasonable profit based on the contractor's assumption of risk and input to total performance and not merely the application of a predetermined percentage factor. For the purpose of negotiated change orders to construction contracts under grants, profit is defined as the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price. The municipality should review the estimate of profit as it reviews all other elements of price.

(7) Related work. Related work shall not be split into two amendments or change orders merely to keep it under $100,000 and thereby avoid the requirements of (4) of this section. For change orders which include both additive and deductive items:

(A) If any single item (additive or deductive) exceeds $100,000 the requirements of (4) of this section shall be applicable.

(B) If no single additive or deductive item has a value of $100,000 but the total price of the change order is over $100,000, the requirements of (4) of this section shall be applicable.

(C) If the total of additive items of work in the change order exceeds $100,000 or the total of deductive items of work in the change order exceeds $100,000 and the net price of the change order is less than $100,000, the requirements of (4) of this section shall be applicable.

(j) **Subcontracts under Construction Contracts.**

(1) The award or execution of subcontracts by a prime contractor under a construction contract awarded to the prime contractor by the municipality, and the procurement and negotiation procedures used by prime contractors in awarding or executing subcontracts are not required to comply with any of the provisions, selection procedures, policies or principles set forth in Section 22a-439-4 (f) or (h) except those specifically stated in this section. In addition, the bid protest procedures of Section 22a-439-4 (m) are not available to parties executing subcontracts with prime contractors except as specifically provided in that section.

(2) The award or execution of subcontracts by a prime contractor under a formally advertised, competitively bid, fixed price construction contract awarded to the prime contractor by the municipality, and the procurement and negotiation procedures

used by such prime contractors in awarding or executing such subcontracts must comply with any municipality procurement system, State small, minority and women's business policy, (Section 22a-439-4 (f) (9)), negotiation of contract amendments (Section 22a-439-4 (i)), and clauses (8) and (9) of Section 22a-439-4 (e).

(k) **Progress Payments to Contractors.**

(1) Except as State law otherwise provides, municipalities should make prompt progress payments to prime contractors and prime contractors should make prompt progress payments to subcontractors and suppliers for eligible construction, material, and equipment costs, including those of undelivered, specifically manufactured equipment, incurred under a contract under a State-funded construction grant.

(2) Conditions of progress payments. For purposes of this section, progress payments are defined as follows:

(A) Payments for work in place.

(B) Payments for materials or equipment which have been delivered to the construction site, or which are stockpiled in the vicinity of the construction site, in accordance with the terms of the contract, when conditional or final acceptance is made by or for the municipality. The municipality shall assure that items for which progress payments have been made are adequately insured and are protected through appropriate security measures. Costs of such insurance and security are allowable costs.

(C) Payments for undelivered specifically manufactured items or equipment (excluding off-the-shelf or catalog items) as work on them progresses. Such payments must be made if provisions therefor are included in the bid and contract documents. Such provisions may be included at the option of the municipality only when all of the following conditions exist:

(i) The equipment is so designated in the project specifications.

(ii) The equipment to be specifically manufactured for the project could not be readily utilized on nor diverted to another job.

(iii) A fabrication period of more than 6 months is anticipated.

(3) Protection of progress payments made for specifically manufactured equipment. The municipality will assure protection of the State's interest in progress payments made for items or equipment referred to in (2) (C) of this section. The protection must be acceptable to the municipality and must take the form of:

(A) Securities negotiable without recourse, condition or restrictions, a progress payment bond, or an irrevocable letter of credit provided to the municipality through the prime contractor by the subcontractor or supplier; and

(B) For items or equipment in excess of $200,000 in value which are manufactured in a jurisdiction in which the Uniform Commercial Code is applicable, the creation and perfection of a security interest under the Uniform Commercial Code which is reasonably adequate to protect the interests of the municipality.

(4) Limitations on progress payments for specifically manufactured equipment.

(A) Progress payments made for specifically manufactured equipment or items shall be limited to the following:

(i) A first payment upon submission by the prime contractor of shop drawings for the equipment or items in an amount not exceeding 15 percent of the contract or item price plus appropriate and allowable higher tier costs; and

(ii) Subsequent to the municipality's release or approval for manufacture, additional payments not more frequently than monthly thereafter up to 75 percent of the contract or item price plus appropriate and allowable higher tier costs. However, payment may also be made in accordance with the contract and grant terms and

conditions for ancillary onsite work before delivery of the specifically manufactured equipment or items.

(B) In no case may progress payments for undelivered equipment or items under (4) (A) (i) or (4) (A) (ii) of this section be made in an amount greater than 75 percent of the cumulative incurred costs allocable to contract performance with respect to the equipment or items. Submission of a request for any such progress payments must be accompanied by a certification furnished by the fabricator of the equipment or item that the amount of progress payment claimed constitutes not more than 75 percent of cumulative incurred costs allocable to contract performance and, in addition, in the case of the first progress payment request a certification that the amount claimed does not exceed 15 percent of the contract or item price quoted by the fabricator.

(C) As used in this section, the term ''costs allocable to contract performance'' with respect to undelivered equipment or items includes all expenses of contract performance which are reasonable, allocable to the contract, consistent with sound and generally accepted accounting principles and practices consistently applied and which are not excluded by the contract.

(5) Enforcement. A subcontractor or supplier which is determined by the Commissioner to have frustrated the intent of the provisions regarding progress payments for major equipment or specifically manufactured equipment through intentional forfeiture of its bond or failure to deliver the equipment may be determined nonresponsible and ineligible for further work under State funded projects.

(6) Contract provisions. Where applicable, appropriate provisions regarding progress payments must be included in each contract and subcontract.

(7) Implementation. The foregoing progress payments policy should be implemented in invitations for bids under construction grants. If provision for progress payments is made after contract award, it must be for consideration that the municipality deems adequate.

(*l*) **Retention from Progress Payments.**

(1) The municipality may retain a portion of the amount otherwise due the contractor. The amount the municipality retains shall be limited to the following:

(A) Withholding of not more than 5 percent of the payment claimed until work is 50 percent complete.

(B) When work is 50 percent complete, reduction of the withholding to 2 percent of the dollar value of all work satisfactorily completed to date, provided that the contractor is making satisfactory progress and there is no specific cause for greater withholding.

(C) When the work is substantially complete (operational or beneficial occupancy), the withheld amount shall be further reduced below 2 percent to only that amount necessary to assure completion.

(D) The municipality may reinstate up to 5 percent withholding if the municipality determines, at its discretion, that the contractor is not making satisfactory progress or there is other specific cause for such withholding.

(E) The municipality may accept securities negotiable without recourse, condition or restrictions, a release of retainage bond, or an irrevocable letter of credit provided by the contractor instead of all or part of the cash retainage.

(2) The foregoing retention policy shall be implemented with respect to all construction projects. Appropriate provision to assure compliance with this policy must be included in the bid documents for such projects initially or by addendum

before the bid submission date and as a special condition in the grant agreement or in a grant amendment.

(3) A municipality which delays disbursement of grant funds will be required to credit to the State of Connecticut all interest earned on those funds.

(m) **Protests.**

(1) General. A protest based upon an alleged violation of the procurement requirements may be filed against a municipality's procurement action by a party with an adversely affected direct financial interest. Any such protest must be received by the municipality within the time period in (2) (A) of this section. The municipality is responsible for resolution of the protest before taking the protested action, in accordance with (4) of this section, except as otherwise provided by (10) of this section.

(2) Time limitations.

(A) A protest under (4) of this section should be made as early as possible during the procurement process to avoid disruption of or unnecessary delay to the procurement process. A protest authorized by (4) of this section must be received by the municipality within one week after the basis for the protest is known or should have been known, whichever is earlier.

(i) In the case of an alleged violation of the specification requirements of Section 22a-439-4 (f) (12), relating to specifications (e.g., that a product fails to qualify as an ''or equal'') a protest need not be filed prior to the opening of bids. The municipality may resolve the issue before receipt of bids or proposals through a written or other formal determination, after notice and opportunity to comment is afforded to any party with a direct financial interest.

(ii) When an alleged violation of the specification requirements first arises subsequent to the receipt of bids or proposals, the municipality must decide the protest if the protest was received by the municipality within one week of the time that the municipality's written or other formal notice is first received.

(B) A protest appeal authorized by (5) of this section must be filed in a court of competent jurisdiction within the locality of the municipality within one week after the complainant has received the municipality's determination.

(C) If a protest is mailed, the complaining party bears the risk of nondelivery within the required time period. All documents transmitted in accordance with this section shall be mailed by certified mail (return receipt requested) or otherwise delivered in a manner which will objectively establish the date of receipt. Initiation of protest actions under (4) or (5) of this section may be made by brief telegraphic notice accompanied by prompt mailing or other delivery of a more detailed statement of the basis for the protest. Telephone protests will not be considered.

(3) Other initial requirements.

(A) The initial protest document must briefly state the basis for the protest and should:

(i) Refer to the specific portions of these regulations which allegedly prohibit the procurement action;

(ii) Specifically request a determination pursuant to this section;

(iii) Identify the specific procurement document(s) or portion(s) of them in issue; and

(iv) Include the name, telephone number, and address of the person representing the protesting party.

(B) The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct

financial interest which may be adversely affected by the determination of the protest (all bidders or proposers who appear to have a substantial and reasonable prospect of receiving an award if the protest is denied or sustained) and to the Commissioner.

(4) Municipality determination.

(A) The municipality is responsible for the initial resolution of protests based upon alleged violations of the procurement requirements.

(B) When the municipality receives a timely written protest, it must defer the protested procurement action in accordance with (8) of this section and:

(i) Afford the complaining party and interested parties an opportunity to present arguments in support of their views in writing or at a conference or other suitable meeting (such as a city council meeting);

(ii) Inform the complainant and other interested parties of the procedures which the municipality will observe for resolution of the protest;

(iii) Obtain an appropriate extension of the period for acceptance of the bid and bid bond(s) of each interested party, where applicable (failure to agree to a suitable extension of such bid and bid bond(s) by the party which initiated the protest shall be cause for summary dismissal of the protest by the municipality or the Commissioner); and

(iv) Promptly deliver (by certified mail, return receipt requested, or by personal delivery) its written determination of the protest to the complaining party and to each other participating party.

(C) The municipality's determination must be accompanied by a legal opinion addressing issues arising under State, or local law, if any and, when construction is involved, by an engineering report, if appropriate.

(D) The municipality should decide the protest as promptly as possible-generally within 3 weeks after receipt of a protest, unless extenuating circumstances require a longer period of time for proper resolution of the protest.

(5) Procedures.

(A) Where resolution of an issue properly raised with respect to a procurement requirement necessitates prior or collateral resolution of a legal issue arising under State or local law, and such law is not clearly established in published legal decisions of the State or other relevant jurisdiction, the municipality may rely upon:

(i) An opinion of the municipality's legal counsel adequately addressing the issue; or

(ii) The established or consistent practice of the municipality, to the extent appropriate; or

(iii) The law of other local jurisdictions as established in published legal decisions; or

(iv) If none of the foregoing adequately resolve the issue, published decisions of the Comptroller General of the United States (U.S. General Accounting Office) or of the Federal or State courts addressing Federal or State requirements comparable to procurement requirements of this section.

(B) A party who submits a document subsequent to initiation of a protest proceeding must simultaneously furnish each of the other parties with a copy of such document.

(C) The procedures established herein are not intended to preclude informal resolution or voluntary withdrawal of protests. A complainant may withdraw its appeal at any time, and the protest proceedings shall thereupon be terminated.

(D) A protest may be dismissed for failure to comply with procedural requirements set forth in this section.

(6) Burden of proof.

(A) In protest proceedings, if the municipality proposes to award a formally advertised, competitively bid, fixed price contract to a party who has submitted the apparent lowest price, the party initiating the protest will bear the burden of proof.

(B) In protest proceedings:

(i) If the municipality proposes to award a formally advertised, competitively bid, fixed price contract to a bidder other than the bidder which submitted the apparent lowest price, the municipality will bear the burden of proving that its determination concerning responsiveness is in accordance with these regulations; and

(ii) If the basis for the municipality's determination is a finding of nonresponsibility, the municipality must establish and substantiate the basis for its determination and must adequately establish that such determination has been made in good faith.

(7) Deferral of procurement action. Upon receipt of a protest, the municipality must defer the protested procurement action (for example, defer the issuance of solicitations, contract award, or issuance of notice to proceed under a contract) until ten days after delivery of its determination to the participating parties. The municipality may receive or open bids at its own risk, if it considers this to be in its best interest. When the Commissioner has received a written protest, he must notify the municipality promptly to defer its protested procurement action until notified of the formal or informal resolution of the protest.

(8) Enforcement. Noncompliance with the procurement provisions by the municipality shall be cause for enforcement action in accordance with one or more of the provisions of Section 22a-439-4 (f) (23).

(9) Limitation. A protest may not be filed with respect to the following:

(A) Issues not arising under the procurement provisions; or

(B) Issues relating to the selection of a consulting engineer, provided that a protest may be filed only with respect to the mandatory procedural requirements of Section 22a-439-4 (g); or

(C) Issues primarily determined by local law or ordinance and as to which the Commissioner, upon review, determines that there is no contravening state requirement and that the municipality's action has a rational basis; or

(D) Provisions of State regulations applicable to direct State contracts unless such provisions are explicitly referred to or incorporated in these regulations; or

(E) Basic project design determinations; or

(F) Award of subcontracts or issuance of purchase orders under formally advertised, competitively bid, lump sum construction contracts. However, protest may be made to alleged violations of the following:

(i) Specification requirements of Section 22a-439-4 (f) (12); or

(ii) Provisions applicable to the procurement procedures, negotiation or award of subcontracts or issuance of purchase orders under Section 22a-439-4 (j).

(n) **Grant Conditions.**

Grants for pollution abatement facilities shall be subject to the following conditions:

(1) Municipality Responsibilities.

(A) Review or approval of engineering reports, plans and specifications or other documents by the Commissioner is for administrative purposes only and does not relieve the municipality of its responsibility to properly plan, design, build and effectively operate and maintain the pollution abatement facilities described in the grant agreement as required under law, regulations, permits, and good management practices. The Commissioner is not responsible for increased building costs resulting

from defects in the plans, design drawings and specifications or other subagreement documents.

(B) By its acceptance of the grant, the municipality agrees to complete the pollution abatement facilities in accordance with the engineering report, plans and specifications and related grant documents approved by the Commissioner and to maintain and operate the pollution abatement facilities to meet the enforceable requirements of the permit issued pursuant to Section 22a-430 of the Connecticut General Statutes for the design life of the pollution abatement facilities. The Commissioner may seek specific enforcement or recovery of funds from the municipality, or take other appropriate action if he determines that the municipality has failed to make good faith efforts to meet its obligations under the grant.

(C) The municipality agrees to pay the non-State costs of the pollution abatement facilities construction associated with the project and commits itself to complete the construction of the operable pollution abatement facilities, and the complete pollution abatement facilities of which the project is a part.

(2) Nondiscrimination.

Contracts involving construction work of $5,000 or more are subject to nondiscrimination requirements of the Governor's Executive Order No. Three and to the Guidelines and Rules issued by the State Labor Commissioner to implement Executive Order No. Three.

(3) State Wage Rates.

Contracts involving construction work are subject to the appropriate State wage rates issued by the State Labor Commissioner.

(4) Access.

The municipality must insure that the Commissioner and his duly authorized agents will have access to the project work whenever it is in preparation or progress. The municipality must provide proper facilities for access and inspection. The municipality must allow any authorized agent of the State to have access to any books, documents, plans, reports, papers, and other records of the contractor which are pertinent to the project for the purpose of making audit, examination, excerpts, copies and transcriptions. The municipality must insure that a party to a subagreement will provide access to the project work, sites, documents, and records.

(5) Project Changes.

(A) Minor changes in the project work that are consistent with the objectives of the project and within the scope of the grant agreement do not require the execution of a formal grant amendment before the municipality's implementation of the change. However, if such changes increase the costs of the project, the amount of the funding provided by the grant agreement may only be increased by a formal grant amendment.

(B) The municipality must receive from the Commissioner a formal grant amendment before implementing changes which:

(i) Alter the project performance standards.

(ii) Alter the type of treatment facilities provided by the project.

(iii) Delay or accelerate the project schedule.

(iv) Substantially alter the engineering report, design drawings and specifications, or the location, size, capacity, or quality of any major part of the project.

(6) Operation and Maintenance.

(A) The municipality must make provisions satisfactory to the Commissioner for assuring economical and effective operation and maintenance of the pollution abatement facilities in accordance with a plan of operation approved by the Commissioner.

(B) The Commissioner shall not pay more than 50 percent of the State share of any project unless the municipality has an approved final plan of operation, and shall not pay more than 90 percent of the State share of any project unless the municipality has an approved operation and maintenance manual.

(7) Adoption of Sewer Use Ordinance and User Charge System.

The municipality shall adopt the sewer use ordinance and implement the user charge system developed under Section 22a-439-3 (e) and (f) and approved by the Commissioner before the pollution abatement facilities are placed in operation. Further, the municipality shall implement the user charge system and sewer use ordinance for the useful life of the pollution abatement facilities.

(8) Value Engineering.

The municipality must comply with the applicable requirements of Section 22a-439-3 (d) for value engineering.

(9) Project Initiation and Completion.

(A) The municipality shall expeditiously initiate and complete the project in accordance with the project schedule contained in the grant agreement. Failure to promptly initiate and complete a project may result in annulment or termination of the grant.

(B) The municipality shall initiate procurement action for building the project promptly after award of a construction grant. The Commissioner may annul or terminate the grant if the municipality has not awarded the subagreements and issued a notice to proceed, where one is required, for building all significant elements of the project within twelve (12) months of the construction grant award. Failure to promptly award all subagreement(s) for building the project will result in a limitation on allowable costs.

(10) Municipality Responsibility for Project Performance.

(A) The municipality shall select the engineer or engineering firm principally responsible for either supervising construction or providing architectural and engineering services during construction as the prime engineer to provide the following services during the first year following the initiation of operation:

(i) Direct the operation of the project and revise the operation and maintenance manual for the project as necessary to accommodate actual operation experience.

(ii) Train or provide for training of operating personnel including the preparation of curricula and training material for operating personnel.

(iii) Advise the municipality whether the project is capable of meeting the project performance standards.

(B) On the date one year after the initiation of operation of the project the municipality shall certify to the Commissioner whether the project is capable of meeting the project performance standards. If the project does not meet the project performance standards, the municipality shall submit the following:

(i) A corrective action report which includes an analysis of the cause of the project's inability to meet the performance standards including infiltration/inflow reduction, and estimates of the nature, scope and cost of the corrective action necessary to bring the project into compliance. Such corrective action report shall be prepared at other than State expense.

(ii) The schedule for undertaking in a timely manner the corrective action necessary to bring the project into compliance.

(iii) The scheduled date for certifying to the Commissioner that the project is capable of meeting the project performance standards.

(C) Corrective action necessary to bring a project into compliance with the project performance standards shall be undertaken by the municipality at other than State expense.

(D) Nothing in this section shall be construed to prohibit a municipality from requiring more assurances, guarantees, or indemnity or other contractual requirements from any party performing project work.

(11) Final Inspection.

The municipality shall notify the Commissioner of the completion of project construction. The Commissioner shall cause final inspection to be made within 60 days of the receipt of the notice. When final inspection is completed and the Commissioner determines that the pollution abatement facilities have been satisfactorily constructed in accordance with the grant agreement, the municipality may make a request for final payment.

(o) **Grant Amendments.**

(1) Grant agreements may be amended for project changes in accordance with this section. No grant agreement may be amended to increase the amount of a grant unless the grant funds are available for obligation. A formal grant amendment shall be effected only by a written amendment to the grant agreement.

(2) For grants awarded under these regulations, an amendment to increase the grant amount may be made for:

(A) Change orders, claims and arbitration settlements.

(B) Revised bid documents.

(C) Project changes required by the Commissioner.

(D) Increased costs on architectural/engineering agreements.

(p) **Enforcement.**

If the Commissioner determines that the municipality has failed to comply with any provision of these regulations, he may impose any of the following:

(1) The grant may be terminated or annulled under Section 22a-439-4 (s) (3) and (4).

(2) Project costs directly related to the noncompliance may be disallowed.

(3) Payment otherwise due to the municipality of up to 10 percent may be withheld.

(4) Project work may be suspended.

(5) A noncomplying municipality may be found nonresponsible or ineligible for future State assistance.

(6) An injunction may be entered or other equitable relief afforded by a court or appropriate jurisdiction.

(7) Such other administrative or judicial action may be instituted if it is legally available and appropriate.

(q) **Grant Payments.**

The municipality shall be paid the State share of allowable project costs incurred within the scope of an approved project and which are currently due and payable from the municipality (i.e. not including withheld or deferred amounts), up to the grant amount set forth in the grant agreement and any amendments thereto. Payments for engineering services shall be made in accordance with Section 22a-439-4 (d) and payments for construction contracts shall be made in accordance with Section 22a-439-4 (k) and (*l*). All allowable costs incurred before initiation of construction of the project must be claimed in the application for grant assistance for that project before the award of the assistance or no subsequent payment will be made for the costs.

(1) Initial request for payment. Upon award of grant assistance, the municipality may request payment for the unpaid State share of allowable project costs incurred before grant award. Payment for such costs shall be made in accordance with the negotiated payment schedule included in the grant agreement.

(2) Interim requests for payment. The municipality may submit requests for payments for allowable costs in accordance with the negotiated payment schedule included in the grant agreement. Upon receipt of a request for payment, the Commissioner shall cause to be disbursed from obligated funds such amounts as are necessary so that the total amount of State payments to the municipality for the project is equal to the State share of the allowable project costs incurred to date as certified by the municipality in its most recent request for payment. Generally, payments will be made within 20 days after receipt of a request for payment.

(3) Adjustment. At any time before final payment under the grant, the Commissioner may cause any request(s) for payment to be reviewed or audited and make appropriate adjustment.

(4) Refunds, rebates, credits, etc. The State share of any refunds, rebates, credits or other amounts (including any interest) that accrue to or are received by the municipality for the project, and that are properly allocable to costs for which the municipality has been paid under a grant, must be credited to the current State allotment. Reasonable expenses incurred by the municipality for the purpose of securing such refunds, rebates, credits, or other amounts shall be allowable under the grant when approved by the Commissioner.

(5) Final payment. After the completion of final inspection, approval of the request for payment which the municipality designates as the ''final payment request,'' and the municipality is deemed in compliance with all applicable requirements of the grant agreement, the Commissioner shall pay to the municipality any balance of the share of allowable project costs which has not already been paid. The municipality must submit the final payment request within six (6) months after final inspection.

(6) Assignment and release. By its acceptance of final payment, the municipality agrees to assign to the State the share of refunds, rebates, or credits or other amounts, including any interest, properly allocable to costs for which the municipality has been paid by the State under the grant. The municipality thereby also releases and discharges the State, its officers, agents and employees from all liabilities, obligations, and claims arising out of the project work or under the grant, subject only to exceptions previously specified in writing between the Commissioner and the municipality.

(r) **Administrative Grant Changes.**

(1) Transfer of grants; Change of name agreements.

Transfer of grant and change of name agreements require the prior written approval of the Commissioner. The municipality may not approve any transfer of a grant without the concurrence of the Commissioner. The Commissioner shall prepare the necessary grant transfer documents upon receipt of appropriate information and documents submitted by the municipality.

(2) Suspension of grants (stop work orders).

Work on a project or on a portion or phase of a project for which a grant has been awarded may be ordered stopped by the Commissioner.

(A) Use of stop-work orders. Work stoppage may be required for good cause such as default by the municipality, failure to comply with the terms and conditions of the grant, realignment of programs, lack of adequate funding, or advancements in the state of the art. Inasmuch as stop-work orders may result in increased costs

to the State by reason of standby costs, such orders will be issued only after a review by the Commissioner. Generally, use of a stop-work order will be limited to those situations where it is advisable to suspend work on the project or a portion or phase of the project for important program or agency considerations and a supplemental agreement providing for such suspension is not feasible. Although a stop-work order may be used pending a decision to terminate by mutual agreement or for other cause, it will not be used in lieu of the issuance of a termination notice after a decision to terminate has been made.

(B) Contents of stop-work orders should be discussed with the municipality and should be appropriately modified in light of such discussions. Stop-work orders should include a clear description of the work to be suspended, instructions to the issuance of further orders by the municipality for materials or services guidance as to action to be taken on subagreements, and other suggestions to the municipality for minimizing costs.

(C) Issuance of stop-work order. After appropriate review of the proposed action has occurred, the Commissioner may, by written order to the municipality, require the grantee to stop all or any part of the project work for a period of not more than forty-five (45) days after the order is delivered to the municipality, and for any further period to which the parties may agree. The Commissioner shall prepare the necessary documents for the stop-work order. Any such order shall be specifically identified as a stop-work order issued pursuant to this section.

(D) Effect of stop-work order.

(i) Upon receipt of a stop-work order, the municipality shall forthwith comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within the suspension period or within any extension of that period which the parties shall have agreed, the State shall either cancel the stop-work order, in full or in part, terminate the work covered by such order as provided in Section 22a-439-4 (s) (3), or authorize resumption of work.

(ii) If a stop-work order is canceled or the period of the order or any extension thereof expires, the municipality shall promptly resume the previously suspended work. An equitable adjustment shall be made in the grant period, the project period, or grant amount, or all of these, and the grant instrument shall be amended accordingly if the stop-work order results in an increase in the time required for, or an increase in the municipality's cost properly allocable to, the performance of any part of the project and the municipality asserts a written claim for such adjustment within sixty (60) days after the end of the period of work stoppage.

(iii) If a stop-work order is not canceled and the grant-related project work covered by such order is within the scope of a subsequently-issued termination order, the reasonable cost resulting from the stop-work order shall be allowed in arriving at the termination settlement.

(iv) Costs incurred by the municipality or its contractors, subcontractors, or representatives, after a stop-work order is delivered, or within any extension of the stop-work period to which the parties shall have agreed, with respect to the project work suspended by such order or agreement which are not authorized by this section or specifically authorized in writing by the Commissioner, shall not be allowable costs.

(3) Termination of Grants

A grant may be terminated in whole or in part by the Commissioner in circumstances where good cause can be demonstrated.

(A) Termination agreement. The parties may enter into an agreement to terminate the grant at any time pursuant to terms which are consistent with these regulations. The agreement shall establish the effective date of termination of the project and grant, the basis for settlement of grant termination costs, and the amount and date of payment of any sums due either party. The Commissioner will prepare the necessary grant termination documents.

(B) Project termination by municipality. A municipality may not unilaterally terminate the project work for which a grant has been awarded, except for good cause. The municipality must promptly give written notice to the Commissioner of any complete or partial termination of the project work by the municipality. If the Commissioner determines that there is good cause for the termination of all or any portion of a project for which the grant has been awarded, he may enter into a termination agreement or unilaterally terminate the grant, effective with the date of cessation of the project work by the municipality. If the Commissioner determines that a municipality has ceased work on the project without good cause, he may unilaterally terminate or annul the grant.

(C) Grant termination by Commissioner.

(i) Notice of intent to terminate. The Commissioner shall give not less than ten (10) days written notice to the municipality of intent to terminate a grant in whole or in part.

(ii) Termination action. The municipality must be afforded an opportunity for consultation prior to any termination. After the Commissioner has been informed of any expressed views of the municipality and concurs in the proposed termination, the Commissioner may, in writing, terminate the grant in whole or in part.

(iii) Basis for termination. A grant may be terminated by the Commissioner for good cause subject to negotiation and payment of appropriate termination settlement costs.

(D) Effect of termination. Upon termination, the municipality must refund or credit to the State that portion of the grant funds paid or owed to the municipality and allocable to the terminated project work, except such portion thereof as may be required to meet commitments which had become firm prior to the effective date of termination and are otherwise allowable. The municipality shall not make any new commitment without State approval. The municipality shall reduce the amount of outstanding commitments insofar as possible and report to the Commissioner the uncommitted balance of funds awarded under the grant.

(4) Annulment of Grant.

The Commissioner may annul the grant if he determines that there has been no substantial performance of the project work without good cause, there is convincing evidence the grant was obtained by fraud, or there is convincing evidence of gross abuse or corrupt practices in the administration of the project. In addition to such remedies as may be available to the State under State, or local law, all grant funds previously paid to the municipality shall be returned or credited to the State and no further payments shall be made to the municipality.

(5) Deviations.

The Commissioner is authorized to approve deviations from requirements of these regulations when he determines that such deviations are essential to effect necessary grant actions or where special circumstances make such deviations in the best interest of the State.

(A) Request for deviation. A request for a deviation shall be submitted in writing to the Commissioner as far in advance as the exigencies of the situation will permit. Each request for a deviation shall contain as a minimum:

(i) The name of the municipality, the grant identification number, and the dollar value, if appropriate.

(ii) Identification of the section of these regulations from which a deviation is sought.

(iii) An adequate description of the deviation and the circumstances in which it will be used, including all appropriate justification for the deviation request.

(iv) A statement as to whether the same or a similar deviation has been required previously and, if so, circumstances of the previous request.

(B) Approval of deviation. Deviations may be approved only by the Commissioner. A copy of each such written approval shall be retained in the official State grant file.

(Effective August 22, 1985)

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Hazardous Waste Management

Secs. 22a-449 (c)-1—22a-449 (c)-10.

Repealed, July 17, 1990.

Sec. 22a-449 (c)-11. Transporter permits

(a) **Permit Required**—Except as provided in Subsection (b), a person shall not transport hazardous wastes in or through the State of Connecticut without having received a permit from the Commissioner.

(b) **Exclusions**

A transporter permit is not required for a generator of hazardous waste who transports via equipment owned by the generator a total of less than 1,000 kilograms of hazardous wastes in a calendar month to an off-site waste facility within the State of Connecticut, providing the facility either has a permit from the Commissioner or is operating under interim status pursuant to Section 22a-449 (c)-16 (a) of these regulations.

(c) **Term of Permit**

(1) A permit shall be valid for a fixed term not to exceed five years beginning July first.

(2) (A) The Commissioner may issue a permit to a transporter of hazardous waste for a duration that is less than 5 years so that a portion of the permits issued expire each year.

(B) The Commissioner shall maintain a written schedule for permit expiration, which shall be based upon the identification numbers assigned pursuant to subdivision (d) (2) of this section.

(d) **Permit Application**

(1) All persons transporting hazardous waste in or through the state who hold a permit which expires on June 30 of that calendar year, shall, by March 1 of that year, submit to the Commissioner a separate permit application for each business location.

(2) The transporter shall list each vehicle or container used for the transportation of hazardous waste on the application form. Upon granting the transporter permit, the Commissioner will assign each vehicle or container a unique identification number. Bulk shipments by rail or water shall be governed only by 40 CFR Part 263.

(e) **Suspension or Revocation of Permit**

(1) Grounds for Suspension or Revocation

The Commissioner may suspend or revoke the transport permit for:

(A) Violation of any applicable requirement for transporters of Federal or State statute or regulation or permit terms or conditions;

(B) Aiding, abetting or permitting the violation of any provision of the permit or Federal or State statute or regulation;

(C) Any action or omission associated with the transport of hazardous waste that could cause a hazard to the public health or the environment;

(D) Misrepresentation or omission of a significant fact either in the application for a permit or in information subsequently reported to the Commissioner; or

(E) Failure to comply with any order issued by the Commissioner.

(2) Procedures for Suspension or Revocation

(A) The Commissioner may temporarily suspend, annul or withdraw a hazardous waste transportation permit prior to any hearing when, in his opinion, such action is necessary to protect the public health, domestic livestock or wildlife, or the environment in accordance with Section 4-182 (c) Connecticut General Statutes.

(f) **Transfer of Permits**—Permits issued under this part may not be transferred without the approval of the Commissioner.

(g) **Permit Modifications**—(1) Minor Modification-Upon a request by the permittee, the Commissioner may make corrections or changes in the permit that do not significantly alter the nature of the permit.

(2) Formal Modification—A request for modification may be made by any interested person or upon the Commissioner's initiative. All requests shall be in writing and shall contain facts or reasons supporting the request.

(h) **Fees**—Each recipient of a new or renewed permit to transport hazardous waste and each applicant for a permit modification involving a change in the type of waste to be transported or a material alteration of a storage facility used by the applicant transporter shall pay the fees specified in section 22a-454-1 of the Regulations of Connecticut State Agencies.

(Effective November 23, 1988)

Secs. 22a-449 (c)-12—22a-449 (c)-43.

Repealed, July 17, 1990.

Secs. 22a-449 (c)-44—22a-449 (c)-99. Reserved

Sec. 22a-449(c)-100. Hazardous waste management system: general

(a) **General**

(1) Unless specifically excluded by the state hazardous waste management regulations, when a provision of the Code of Federal Regulations (CFR) is incorporated by reference, or cited in the state hazardous waste management regulations, all notes, comments, appendices, diagrams, tables, and figures referred to or cited in such provision are also incorporated by reference. In addition, when a provision of the CFR is incorporated by reference or cited in the state hazardous waste management regulations, such reference shall be deemed to include all modifications made to any such provision by the state hazardous waste management regulations.

(2) When a provision of the CFR is incorporated by reference, unless otherwise noted all internal references contained therein are also incorporated by reference for the purposes of that provision. Each internal reference to the CFR is intended to include any modifications to such internal reference made by the state hazardous waste management regulations.

(3) Provisions of the CFR which are specifically excluded from incorporation by reference in the state hazardous waste management regulations are excluded in their entirety unless otherwise specified, notwithstanding any apparent limitations in the scope of the explanatory language enclosed in parentheses following the citation of the excluded provision. Such explanatory language is included solely for the convenience of the reader.

(4) In the event that there are inconsistencies or duplications in the requirements of the provisions incorporated by reference from 40 CFR 260 et seq. and the regulations set forth in the state hazardous waste management regulations, the provisions incorporated by reference from 40 CFR 260 et seq. shall prevail, except where the regulations set forth in the state hazardous waste management regulations are more stringent.

(5) Whenever the state hazardous waste management regulations refer to a period of retention which may be specified by the commissioner, the commissioner will not specify any period of retention less than three years. The retention period for all records required under the state hazardous waste management regulations shall

be extended automatically during the course of any unresolved enforcement action or as requested by the commissioner in writing.

(6) Nothing in the state hazardous waste management regulations shall affect the commissioner's authority to enforce statutes, regulations, permits or orders administered or issued by the commissioner, including but not limited to the commissioner's authority to issue an order to prevent or abate pollution and potential sources of pollution.

(7) Whenever any provision in the state hazardous waste management regulations, including any provision of the CFR which is incorporated by reference, makes reference to the term ''Act'', ''RCRA'', ''Resources Conservation and Recovery Act'', ''Subtitle C of RCRA'', ''Subtitle C'' or a specific section of any of the foregoing, the phrase ''or any applicable or comparable provision of the Connecticut General Statutes and implementing regulations'' shall be added so that the reference to the federal provision shall be deemed to include such federal provision as well as the applicable or comparable provision of the Connecticut General Statutes and any implementing regulations.

(b) **Incorporation by Reference**

(1) 40 CFR 260 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 260.1 (which relates to purpose, scope and applicability);

(B) 40 CFR 260.2 (which relates to availability of information); and

(C) 40 CFR 260 Subpart C (which relates to rulemaking petitions).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 260.3, introductory sentence — delete ''265 and 268'' and replace with ''266, 268, 270, 273 and 279''

(B) 40 CFR 260.10

— delete the introductory pararagraph in its entirety and replace with the following: ''Except as provided for in section 22a-449(c)-100(c) of the Regulations of Connecticut State Agencies, when used in 40 CFR 260 to 266, inclusive, 268, 270, 273 and 279, the following terms have the meanings given below:''

— delete the definition of ''Remediation Waste Management Site'' in its entirety

— delete the definition of ''Staging Pile'' in its entirety

(C) 40 CFR 260.11(b)

— delete ''these incorporations by reference were approved by the director of the federal register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the federal register.''

(c) **Definitions**. When used in the State Hazardous Waste Management Regulations, including the provisions of the CFR which are incorporated by reference in the State Hazardous Waste Management Regulations:

(1) ''Administrator'', ''Regional Administrator'', ''EPA Regional Administrator'', ''Assistant Administrator'', ''Assistant Administrator for Solid Waste and Emergency Response'' and ''State Director'' mean the commissioner of environmental protection, except that:

(A) when used in 40 CFR 261.10, 261.11, 262.50 to 262.57, inclusive, 262.80 to 262.89, inclusive, 264.12(a), 264.150(a), 265.12(a), 265.150(a), 268.5, 268.6, 268.13, 268.40(b), 268.42(b), 268.44(a)-(g), 270.3, 270.5, 270.10(e)(3), 270.10(f)(3), 270.10(g)(1)(i), 270.11(a)(3) and 270.14(b)(20), ''Administrator'' means the admin-

istrator of the United States Environmental Protection Agency, or the administrator's designee, and ''Regional administrator'' means the regional administrator for the EPA region in which the facility is located, or the regional administrator's designee; and

(B) when used in the definitions of ''Administrator'', ''Hazardous waste constituent'', ''Major facility'', ''Regional administrator'' and ''State/EPA agreement'' in 40 CFR 260.10 or 40 CFR 270.2, ''Administrator'' means the administrator of the United States Environmental Protection Agency, or the administrator's designee, and ''Regional administrator'' means the regional administrator for the EPA region in which the facility is located, or the regional administrator's designee.

(2) ''Agency'', ''EPA'', ''Environmental Protection Agency'', ''United States Environmental Protection Agency'', ''U.S. Environmental Protection Agency'', ''EPA region'' and ''EPA headquarters'' mean the Connecticut Department of Environmental Protection, except that:

(A) when used in 40 CFR 260.11(a), 261.1(a)(2), 261 Appendix IX, 262.50 to 262.57, inclusive, 262.80 to 262.89, inclusive, 264.12(a)(2), 264.71(d), 264.1082(c)(4)(ii) (the second reference to EPA only), 265.12(a)(2), 265.71(d), 265.1083(c)(4)(ii) (the second reference to EPA only), 268.1(e)(3), 268.5(g), 268.10, 268.11, 268.12, 268.44(a)-(g), 270.3, 270.5, 270.72(a)(5), 270.72(b)(5) and 124.10(c)(1)(ii), said terms mean the United States Environmental Protection Agency;

(B) when used in the definitions of ''Approved Program or Approved State'', ''EPA'', ''Environmental Protection Agency'', ''Final Authorization'', ''Interim Authorization'', and ''State/EPA Agreement'' in 40 CFR 270.2, the terms ''Agency'', ''EPA'', ''United States Environmental Protection Agency'', ''U.S. Environmental Protection Agency'', and ''EPA Headquarters'' mean the United States Environmental Protection Agency; and

(C) ''EPA'', when used in the terms ''EPA Identification Numbers'', ''EPA Hazardous Waste Numbers'', ''EPA Test Methods'', ''EPA Publications'', ''EPA Form(s)'', ''EPA Guidance'' and ''EPA Acknowledgment of Consent'', means the United States Environmental Protection Agency.

(3) ''Authorized state'' means Connecticut's Department of Environmental Protection, except that when used in 40 CFR 262.23(e) and in the definition of ''Designated facility'' set forth in section 22a-449(c)-100(c)(11) of the Regulations of Connecticut State Agencies, ''Authorized state'' means any state that, pursuant to 40 CFR 271, has received authorization of its hazardous waste program from the United States Environmental Protection Agency.

(4) ''Battery'' means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a self-contained system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

(5) ''Code of Federal Regulations'' or ''CFR'', in reference to all or any portion of 40 CFR 124 and 260 to 279, inclusive, means the Code of Federal Regulations revised as of July 1, 2000. All other references to the Code of Federal Regulations (i.e., references to provisions other than 40 CFR 124 and 40 CFR 260 to 279, inclusive) mean the Code of Federal Regulations as of June 27, 2002.

(6) ''Commissioner'' means the Commissioner of Environmental Protection of the State of Connecticut, or the commissioner's designee.

(7) ''Corrective action management unit'' or ''CAMU'' means an area within a facility that is designated by the commissioner under 40 CFR 264, subpart S, for the purpose of implementing corrective action remedies under 40 CFR 264.101 or section 22a-449(c)-105(h) of the Regulations of Connecticut State Agencies. A CAMU shall be used only for the management of remediation wastes.

(8) ''Day'' means calendar day, unless otherwise specified.

(9) ''Department'' or ''DEP'' means the Connecticut Department of Environmental Protection.

(10) ''Department of Transportation'' or ''DOT'' means the U.S. Department of Transportation.

(11) ''Designated facility'' means a hazardous waste treatment, storage, or disposal facility which:

(A) has received a permit (or interim status) in accordance with the requirements of section 22a-449(c)-110 of the Regulations of Connecticut State Agencies, has received a permit (or interim status) from a state authorized in accordance with 40 CFR 271, or is regulated under 40 CFR 261.6(c)(2) or 40 CFR 266, subpart F; and

(B) has been designated on the manifest by the generator pursuant to 40 CFR 262.20.

If a waste is destined to a facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste.

(12) ''Destination Facility'' means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in paragraphs (a) and (c) of 40 CFR 273.13 and 273.33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste. For purposes of section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies, a facility that engages in the disassembly or demanufacturing of used electronics: (1) for the purpose of marketing, reselling, reusing or recycling the components of a used electronic device; (2) without treating the device or any component thereof; and (3) without breaking the cathode ray tube, if any, in any such device, shall not be considered a destination facility. A facility that shreds, crushes, heats, or otherwise treats a used electronic device or any component thereof, or that breaks the cathode ray tube in any used electronic device, shall be considered a destination facility.

(13) ''Director'' means commissioner unless the context clearly indicates otherwise, such as where EPA retains the authority to take certain actions, in which case the term ''Director'' means the EPA regional administrator.

(14) ''EPA regional office'' or ''Regional EPA office'' means the Connecticut Department of Environmental Protection, except that when used in 40 CFR 264.143(h), 264.145(h), 265.143(g) and 265.145(g), ''EPA regional office'' means the regional office of the United States Environmental Protection Agency in which the facility is located.

(15) ''Facility'' means:

(A) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing or disposing of hazardous waste. A facility may consist of several treatment, storage or disposal operational units (e.g., one or more landfills, surface impoundments or combinations of them);

(B) For the purpose of implementing corrective action under 40 CFR 264.101, all contiguous property under the control of the owner or operator seeking a permit under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies ; or

(C) For the purpose of implementing corrective action under section 22a-449(c)-105(h) of the Regulations of Connecticut State Agencies, all contiguous property under the control of the owner or operator.

(16) ''Impermeable'' or ''Impervious'' means a natural in-place soil or emplaced soil material having a permeability of less than or equal to 1.0 X 10^{-7}centimeters per second (cm/sec), and, in the case of an artificial liner, the liner and its construction and use have been approved in writing by the commissioner. This definition shall not apply, however, to any secondary containment system or surface that is required to be ''sufficiently impervious''.

(17) ''Integral part of an industrial production process'' means an essential part of an industrial production process that is directly connected to the industrial production process in a manner that meets all of the definitional requirements for a totally enclosed treatment facility as set out in 40 CFR 260.10. For purposes of this definition, ''industrial production process'' may include a laboratory process at an academic or research laboratory if such process satisfies the requirements of this definition.

(18) ''Lamp'' or ''universal waste lamp'' means the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

(19) ''Manifest'' means the shipping document EPA form 8700-22, originated and signed by the generator in accordance with the instructions included in the Appendix to 40 CFR 262 and section 22a-449(c)-102 of the Regulations of Connecticut State Agencies.

(20) ''Manifest document number'' means the U.S. EPA twelve digit identification number assigned to the generator plus a unique five digit document number assigned to the manifest by the generator for recording and reporting purposes, and the number printed on the manifest prescribed by the commissioner.

(21) ''Miscellaneous unit'' means a hazardous waste management unit where hazardous waste is treated, stored or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, containment building, corrective action management unit, or unit eligible for a research, development and demonstration permit under 40 CFR 270.65.

(22) ''Person'' means both ''Person'' and ''Municipality'' as those terms are defined in section 22a-423 of the Connecticut General Statutes, unless otherwise specified.

(23) ''Pesticide'', for purposes of section 22a-449(c)-113 of the Regulations of Connecticut State Agencies, means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant, other than any article that:

(A) is a new animal drug under 21 USC 321(v), section 201(w) of the Federal Food, Drug, and Cosmetic Act; or

(B) is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug; or

(C) is an animal feed under 21 USC 321(w), section 201(x) of the Federal Food, Drug, and Cosmetic Act, that bears or contains any substances described in subparagraphs (A) or (B) of this subdivision.

(24) ''ppmv'' means parts per million by volume.

(25) ''Release'' means any discharge, as defined in 40 CFR 260.10, or any migration of substances from a waste or combination of wastes into the environment.

(26) ''Remediation waste'' means all solid and hazardous wastes, and all media (including groundwater, surface water, soils and sediments) and debris, which contain a listed hazardous waste or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under 40 CFR 264.101 or section 22a-449(c)-105(h) of the Regulations of Connecticut State Agencies. For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing corrective action for releases beyond the facility boundary.

(27) ''Residential building'' means any house, apartment, apartment complex with four or less units, condominium complex with four or less units, cooperative complex with four or less units, trailer, mobile home or other structure occupied by individuals as a dwelling.

(28) ''Small quantity generator'' means a generator who in a calendar month generates more than 100 BUT less than 1000 kilograms of hazardous waste in that calendar month, provided that such waste does not include more than:

(A) a total of one kilogram of acute hazardous wastes listed in 40 CFR 261.31, 261.32 or 261.33(e); or

(B) a total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in 40 CFR 261.31, 261.32, or 261.33(e), provided that there is no more than a total of one kilogram of acute hazardous waste contained in that residue, soil, waste or debris.

Whenever any provision incorporated by reference from 40 CFR 260 to 279, inclusive, refers to a generator who generates between 100 kilograms and 1000 kilograms of hazardous waste in a calendar month, that reference shall be deemed to be a reference to a ''small quantity generator'' as defined in this definiton.

(29) ''State'', ''Approved state'' and ''Approved program'' mean the state of Connecticut, except that:

(A) when used in 40 CFR 261.5(f)(3), 261.5(g)(3), and 40 CFR 262, 264.71(a)(4), 264.71(b)(4), 264.143(h), 264.145(h), 264.147, 264.151, 265.71(a)(4), 265.71(b)(4), 265.143(g), 265.145(g), 265.147, 268.5(e), 268.6, 268.42(b) and 268.44(d), ''State'' means any of the several states, the District of Columbia, the commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa and the commonwealth of the Northern Mariana Islands;

(B) when used in the definition of ''Designated facility'' in section 22a-449(c)-100(c)(11) of the Regulations of Connecticut State Agencies, the definitions of ''EPA Region'', ''Person'', ''State'' and ''United States'' in 40 CFR 260.10, and the definitions of ''Approved program or approved state'', ''Final authorization'', ''Interim authorization'', ''Person'' and ''State'' in 40 CFR 270.2, ''State'' means any of the several states, the District of Columbia, the commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa and the commonwealth of the Northern Mariana Islands; and

(C) when used in the definition of ''Permit'' in 40 CFR 270.2, ''Approved state'' means any state that, pursuant to 40 CFR 271, has received authorization of its hazardous waste program from the United States Environmental Protection Agency.

(30) ''State hazardous waste management regulations'' means sections 22a-449(c)-100 to 119, inclusive, and section 22a-449(c)-11 of the Regulations of Connecticut State Agencies.

(31) ''Sufficiently impervious'' means:

(A) free of gaps, cracks and areas of bare earth;

(B) capable of containing any hazardous waste, used oil or other material that may be accidentally or otherwise released such that any such hazardous waste, used oil or other material released does not migrate or seep from or through the secondary containment system into the environment;

(C) compatible with any hazardous waste, used oil or other material that may be accidentally or otherwise released into the secondary containment system;

(D) if necessary, coated with a material resistant to weathering or damage such that any hazardous waste, used oil or other material that may be accidentally or otherwise released into the secondary containment system does not migrate or seep from or through the secondary containment system into the environment; and

(E) free of floor or other drains, catch basins or similar structures that would allow hazardous waste, used oil or other material to be released into the environment.

(32) ''TEQ'' means toxicity equivalence, the international method described in 40 CFR 266, Appendix IX, section 4.0, of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p dioxin.

(33) ''Universal waste'' means any of the following hazardous wastes: (A) Batteries as described in 40 CFR 273.2; (B) Pesticides as described in 40 CFR 273.3; (C) Thermostats as described in 40 CFR 273.4; (D) Lamps as described in 40 CFR 273.5; and (E) Used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies;

(34) ''Used electronics'' or ''used electronic device'' means a device or component thereof that contains one or more circuit boards or a cathode ray tube and is used primarily for data transfer or storage, communication, or entertainment purposes, including but not limited to, desk top and lap top computers, computer peripherals, monitors, copying machines, scanners, printers, radios, televisions, camcorders, video cassette recorders (''VCRs''), compact disc players, digital video disc players, MP3 players, telephones, including cellular and portable telephones, and stereos.

(35) ''Used oil'' means any oil refined from crude oil or synthetic oil, that: (A) has been used and as a result of such use is contaminated by physical or chemical impurities; or (B) is no longer suitable for the services for which it was manufactured due to the presence of impurities or a loss of original properties.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002, September 10, 2002)

Sec. 22a-449(c)-101. Identification and listing of hazardous waste

(a) **Incorporation by Reference**

(1) 40 CFR 261 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 261.2(a)(2)(iv) (which relates to military munitions);

(B) 40 CFR 261.4(a)(16) (which relates to comparable/syngas fuels);

(C) 40 CFR 261.4(b)(6) (which relates to certain chromium waste);

(D) 40 CFR 261.4(b)(11) (which relates to certain groundwater reinjected through an underground injection well);

(E) 40 CFR 261.4(g) (which relates to dredged material);

(F) 40 CFR 261.38 (which relates to comparable/syngas fuel).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 261.1 (a)

—delete ''265'' and replace with ''266''

(B) 40 CFR 261.1(c)(8)

— delete the first sentence and replace with the following: ''Except as provided for in 40 CFR 266, subpart F, a material, not otherwise defined as a solid waste, is accumulated speculatively and becomes a solid waste if it is accumulated before being recycled. Materials are no longer accumulated speculatively, once they are removed from accumulation for recycling.''

— after ''if'' in the second sentence add ''(1) The material is accumulating in a unit exempt from regulation under 40 CFR 261.4(c), or (2)''

— delete ''— during the calendar year (commencing on January 1) — the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under § 261.4(c) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however'' and replace with ''all material is recycled within one year of the date on which accumulation of that material begins.''

(C) 40 CFR 261.2(a)(2)(iii)

— delete ''; or'' and replace with a ''.''

(D) 40 CFR 261.2(c)(3)

— at the end of the paragraph add the following: ''If, however, before being reclaimed, a person accumulates or stores a material not noted with an '*' in column 3 of Table 1, such person shall mark all containers and tanks holding these materials so that their contents are clearly identified and the date upon which each period of accumulation begins is clearly marked and visible for inspection. When marking the beginning of each period of accumulation for materials accumulated or stored in tanks, the person accumulating or storing such materials does not have to mark the tank itself, but may maintain a written log noting the date upon which each period of accumulation begins, provided such log is maintained in the facility operating record and is available for inspection.''

(E) Table 1 in 40 CFR 261.2(c)

— add an asterisk (*) to column 4 for the category ''Commercial Chemical Products listed in 40 CFR 261.33.''

(F) 40 CFR 261.2(e)

— add a new paragraph (3) as follows: ''(3) Notwithstanding 40 CFR 261.2(e)(1), if materials being recycled are stored in tanks or containers before being used, reused, or returned to the original process from which they were generated, the person accumulating or storing such materials shall mark all containers and tanks holding these materials so that their contents are clearly identified and the date upon which each period of accumulation begins is clearly marked and visible for inspection. When marking the beginning of each period of accumulation for materials accumulated or stored in tanks, the person accumulating or storing such materials does not have to mark the tank itself, but may maintain a written log noting the date upon which each period of accumulation begins, provided such log is maintained in the facility operating record and is available for inspection.''

(G) 40 CFR 261.3(a)(2)(v)

— delete ''Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Third Edition, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).'' and replace with ''To rebut the presumption that the used oil has been mixed with the hazardous waste designated in 40 CFR 261.31(a) as F001 or F002, a person shall demonstrate by analysis or other means that none of the following halogenated hazardous waste constituents are present in the used oil at greater than 100 parts per million: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane. To rebut the presumption that the used oil has been mixed with any other hazardous waste listed in 40 CFR 261, Subpart D, (i.e., hazardous wastes other than F001 and F002) a person shall demonstrate by analysis or other means that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of 40 CFR 261). Unless and until a person has rebutted the presumption, a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such.''

(H) 40 CFR 261.3(c)(2)(i)

— delete ''or leachate (but not including precipitation run-off)'' and replace with ''leachate or precipitation run-off, unless such precipitation run-off is from a treatment, storage or disposal facility registered under and in compliance with the terms and conditions of the general permit issued by the commissioner for the discharge of stormwater associated with industrial activities.''

(I) 40 CFR 261.4(a)(1)(ii)

— at the end of the paragraph add ''Any person claiming a mixture of domestic sewage and other wastes is not solid waste, pursuant 40 CFR 261.4(a)(1)(ii), shall comply with all applicable federal and state notification requirements including, but not limited to, those set forth in 40 CFR 268.7 and 40 CFR 403.12.''

(J) 40 CFR 261.4(a)(15)

— after ''63.446(e)'' add ''provided such condensates are burned as a fuel at the mill where they are generated''

(K) 40 CFR 261.4(a)(17)(iii)

— delete ''(a)(15)(iv)'' and replace with ''(a)(17)(iv)''

— in the last sentence delete ''significant'' and after ''materials'' add ''and shall comply with all other applicable state requirements''

(L) 40 CFR 261.4(a)(17)(iv)

— in the second sentence delete ''do not'' and replace with ''shall not''

— delete ''The decision-maker must affirm that'' and replace with ''As part of any site-specific determination the commissioner must determine, among other things, that''

(M) 40 CFR 261.4(a)(17)(iv)(A)

— delete ''decision-maker'' and replace with the ''commissioner''

(N) 40 CFR 261.4(a)(17)(v)

— delete ''The owner or operator provides'' and replace with ''Thirty days before claiming any exemption under 40 CFR 261.4(a)(17), the person claiming such exemption shall provide''

— after ''recycling process'' in the last sentence add ''and written notification of any such change shall be provided to the commissioner at least thirty days before any such change is made''

(O) 40 CFR 261.4(e)(3)(iii)

— delete ''in the Region where the sample is collected''

(P) 40 CFR 261.5(a)

— after ''in that month'' add ''provided that such waste does not include more than: (i) a total of one kilogram of acute hazardous wastes listed in 40 CFR sections 261.31, 261.32, or 261.33(e), or (ii) a total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in 40 CFR sections 261.31, 261.32, or 261.33(e), provided that there is no more than a total of one kilogram of acute hazardous waste contained in that residue, soil, waste or debris.''

(Q) 40 CFR 261.5(c)(6)

— delete ''40 CFR 261.9 and''

— after ''273'' add ''or section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(R) 40 CFR 261.5(e)(2)

— after ''or 261.33(e)'' add ''provided that there is no more than a total of one kilogram of acute hazardous waste contained in that residue, soil, waste or debris.''

(S) 40 CFR 261.5(f)(3)

— delete paragraphs (iv) to (vii), inclusive, and replace with the following: ''(iv) Permitted, licensed, or registered by a state other than Connecticut to manage municipal solid waste in a state other than Connecticut, and, if managed in a municipal solid waste landfill is subject to 40 CFR 258;

(v) Permitted, licensed, or registered by a state other than Connecticut to manage non-municipal non-hazardous waste in a state other than Connecticut and, if managed in a non-municipal non-hazardous waste disposal unit after January 1, 1998, is subject to the requirements in 40 CFR 257.5 to 257.30, inclusive;

(vi) Licensed by the commissioner to store, bulk or consolidate household hazardous waste, provided such license specifically authorizes the licensee to store, bulk or consolidate hazardous waste generated by a conditionally exempt small quantity generator. For purposes of this subclause only, the term ''facility'' shall include an area used for the one-day collection of household hazardous waste;

(vii) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or

(viii) For universal waste managed under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies, a universal waste handler or destination facility subject to the requirements under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies.''

(T) 40 CFR 261.5(g)(2)

— delete ''special''

— delete ''between 100 kg and'' and replace with ''greater than''

(U) 40 CFR 261.5(g)(3)

— delete paragraphs (iv) to (vii), inclusive, and replace with the following: ''(iv) Permitted, licensed, or registered by a state other than Connecticut to manage municipal solid waste in a state other than Connecticut, and, if managed in a municipal solid waste landfill is subject to 40 CFR 258;

(v) Permitted, licensed, or registered by a state other than Connecticut to manage non-municipal non-hazardous waste in a state other than Connecticut and, if managed in a non-municipal non-hazardous waste disposal unit after January 1, 1998, is subject to the requirements in 40 CFR 257.5 to 257.30, inclusive;

(vi) Licensed by the commissioner to store, bulk or consolidate household hazardous waste, provided such license specifically authorizes the licensee to store, bulk or consolidate hazardous waste generated by a conditionally exempt small quantity generator. For purposes of this subclause only, the term ''facility'' shall include an area used for the one-day collection of household hazardous waste;

(vii) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or

(viii) For universal waste managed under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies, a universal waste handler or destination facility subject to the requirements under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies.''

(V) 40 CFR 261.5(h)

— after ''mixed with non-hazardous waste'' delete ''and'' and replace with ''but will not''

— after ''reduced requirements'' delete ''even though'' and replace with ''if''

— delete '', unless the mixture meets any of the characteristics of hazardous waste identified in Subpart C'' and replace with ''. If the mixture exceeds such quantity limitations, the mixture is subject to full regulation under the state hazardous waste management regulations''

(W) 40 CFR 261.5(j)

— after ''generator's'' add ''hazardous''

— delete ''part 279 of this chapter'' and replace with ''the state hazardous waste management regulations''

(X) 40 CFR 261.6(a)(3)(ii)

— after ''scrap metal'' add ''which meets neither the characteristic of ignitability in 40 CFR 261.21 nor the characteristic of reactivity in 40 CFR 261.23''

(Y) 40 CFR 261.6(a)(4)

— after '' . . . originally used)'' add ''and any oil which is no longer suitable for the services for which it was manufactured due to the presence of impurities or a loss of original properties and is then reused''

(Z) 40 CFR 261.6(c)(1)

— after ''§ 261.6(d)'' add ''and any applicable provisions of state law, including but not limited to, section 22a-454 of the Connecticut General Statutes and the recyclable materials requirements of section 22a-449(c)-101(c) of the Regulations of Connecticut State Agencies.''

(AA) 40 CFR 261.9

— after ''270 of this chapter'' add ''and section 22a-449(c)-11 of the Regulations of Connecticut State Agencies''

— after ''273 of this chapter'' add ''or in the state hazardous waste management regulations''

— after ''40 CFR part 273'' add ''or section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(BB) 40 CFR 261.9(c)

— delete ''and''

(CC) 40 CFR 261.9(d)

— delete the period and replace with ‘‘; and’’

— add a new paragraph (e) as follows: ‘‘(e) Used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies.’’

(DD) 40 CFR 261.31(a)

— In the entry for FO39, after ‘‘F020, F021,’’ add ‘‘F023,’’

(EE) 40 CFR 261.32

— in the column labeled ‘‘Industry and EPA Hazardous Waste No.’’, in the subgroup ‘‘Organic Chemicals’’, add the following Waste Streams in alphanumeric order:

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazardous Code
* * *	* * * * *	* *
Organic Chemicals		
* * *	* * * * *	* *
K174.	Wastewater treatment sludges from the production of Ethylene Dichloride or Vinyl Chloride Monomer (including sludges that result from Commingled Ethylene Dichloride or Vinyl Chloride Monomer Wastewater and other wastewater).	T
K175	Wastewater treatment sludges from the production of Vinyl Chloride Monomer using Mercuric Chloride catalyst in an Acetylene-based process.	T

— in the entry for Secondary Lead, K069, delete the ‘‘.’’ after ‘‘smelting’’ and delete in its entirety the Note which follows and replace with ‘‘, except for sludge generated from secondary acid scrubber systems.’’

— in the entry for K107, delete ‘‘1,1-Dimethyl-hydrazine (UDMH) from Carboxylic Acid Hydrazines’’ and replace with ‘‘1,1-Dimethylhydrazine from Carboxylic Acid Hydrazides’’

(FF) 40 CFR 261.35(b)(1)(iii)

— delete ‘‘preservations’’ and replace with ‘‘preservatives’’

(GG) 40 CFR 261 Appendix VII

— add the following wastestreams in alphanumeric order (by the first column):

EPA Hazardous Waste No.	Hazardous Constituent For Which Listed
* * *	* * * * * *
K174	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (1,2,3,6,7,8,9-HpCDF), HxCDDs (ALL HEXACHLORODIBENZO-P-DIOXINS), HxCDFs (ALL HEXACHLORODIBENZOFURANS), PECDDS (ALL PENTACHLORODIBENZO-P-DIOXINS), OCDD (1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN), OCDF (1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN), PeCDFs (ALL PENTACHLORODIBENZOFURANS), TCDDS (ALL TETRACHLORODIBENZO-P-DIOXINS), TCDFs (ALL TETRACHLORODIBENZOFURANS).
K175	Mercury

(HH) 40 CFR 261 Appendix VIII
— add the following entries in alphabetical order by common name:

COMMON NAME	CHEMICAL ABSTRACTS NAME	CHEMICAL ABSTRACTS NO.	HAZARDOUS WASTE NO.
* * *	* * * *	* *	* *
OCTACHLORODIBENZO-P-DIOXIN (OCDD)	1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN	3268-87-9	. . .
OCTACHLORODIBENZOFURAN (OCDF)	1,2,3,4,6,7,8,9-OCTACHLORODIBENOFURAN	39001-02-0	. . .
* * *	* * * *	* *	* *

(3) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsections (b) and (c) of this section shall apply.

(b) **Conditionally exempt small quantity generators**

In addition to the requirements in 40 CFR 261.5, conditionally exempt small quantity generators shall:

(1) Not offer their hazardous waste to a transporter who does not have an EPA identification number issued pursuant to 40 CFR 263.11 and a current valid transporter permit issued by the commissioner pursuant to section 22a-449(c)-11 of the Regulations of Connecticut State Agencies or section 22a-454 of the Connecticut General Statutes; and

(2) Maintain records of any test results, waste analyses, or other determinations made in accordance with 40 CFR 262.11 for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

(c) **Recyclable Materials**

(1) Scrap metals which meet the characteristic of ''ignitability'' in 40 CFR 261.21 or the characteristic of ''reactivity'' in 40 CFR 261.23 and are being recycled or reclaimed are subject to regulation as a hazardous waste.

(2) Except as provided in subdivision (3) of this subsection, in addition to the requirements in 40 CFR 261.6(b) and (c)(2), a generator that recycles recyclable

materials or the owner or operator of a facility that recycles recyclable materials without storing them is subject to the following requirements:

(A) Registration, which consists of the notification requirements under section 3010 of RCRA (42 USC 6930) and the filing of a completed recyclable materials registration on a form prescribed by the commissioner which shall include, but not be limited to, the information listed in 40 CFR 270.13. Said registration shall be submitted to the commissioner no later than thirty days prior to engaging in the recycling of recyclable materials; and

(B) The filing of a report every two years that satisfies all of the requirements of 40 CFR 264.75, including but not limited to, use of the prescribed form. Unless another time is prescribed by the commissioner in writing, such report shall be submitted to the commissioner no later than March 1 of each even numbered year.

For purposes of this subdivision, ''recyclable materials'' means hazardous wastes that are to be recycled, except for the recyclable materials listed in 40 CFR 261.6(a)(2) and (a)(3).

(3) The provisions of subdivision (2) of this subsection do not apply to:

(A) generators who recycle all of their hazardous wastes immediately upon generation only in:

(i) recycling equipment that is an integral part of an industrial production process, or

(ii) wastewater treatment units;

(B) recycling equipment on the site of a conditionally exempt small quantity generator, as defined in 40 CFR 261.5 as incorporated by subsection (a) of this section, which is used solely by such generator to recycle such generator's waste; and

(C) owners or operators of facilities that store recyclable materials before they are recycled. (Such owners or operators are subject to regulation under 40 CFR 261.6(c)(1) and must obtain a storage permit.)

(4) In accordance with this subdivision, additional requirements may apply on a case-by-case basis to a person engaging in recycling activities, except that the provisions of this subdivision shall not apply to owners or operators subject to regulation under 40 CFR 261.6(c)(1). (Such owners or operators remain subject to regulation under 40 CFR 261.6(c)(1) and are required to obtain a storage permit.) As used in this subdivision, the term ''recyclable materials'' shall include all hazardous wastes awaiting recycling or being recycled, including the materials specified in 40 CFR 261.6(a)(2) and (a)(3), all materials in Table 1 of 40 CFR 261.2 including those that have and do not have an asterisk and all materials in 40 CFR 261.2(e).

(A) The commissioner may decide on a case-by-case basis that a person accumulating, treating or storing recyclable materials shall comply with additional provisions of sections 22a-449(c)-100 to 110, inclusive, of the Regulations of Connecticut State Agencies. The basis for imposing additional requirements may be that the materials are being accumulated, treated or stored in a manner that does not adequately protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being treated or stored together are incompatible, or because the materials have otherwise not been adequately managed. In making this decision, the commissioner will consider the following factors:

(i) The types of materials accumulated, treated or stored and the amounts accumulated, treated or stored;

(ii) The method of accumulation, treatment or storage;

(iii) The length of time the materials have been accumulated, treated or stored before being recycled;

(iv) Whether any substance that can reasonably be expected to cause pollution of the waters of the state has been or may be released into the environment; and

(v) Other factors which the commissioner deems relevant.

(B) Procedures for case-by-case regulation of recycling activities.

The commissioner will use the following procedures when establishing additional requirements with which persons who accumulate, treat or store recyclable materials shall comply:

(i) If the commissioner determines that a person must comply with additional requirements, the commissioner will send a notice by certified mail to the person to whom the additional requirements will apply setting forth the factual basis for the decision and the additional requirements which will apply. Such additional requirements shall become effective thirty days after mailing of the notice or as otherwise specified by the commissioner, unless the person requests a public hearing, within thirty days after the mailing of the notice, to challenge the decision. Upon receiving such a request, the commissioner will hold a public hearing. The commissioner will publish notice of the hearing in a newspaper having a substantial circulation in the affected area and allow public participation at the hearing. After the hearing, the commissioner shall affirm, modify, or revoke the prior decision. Such action by the commissioner shall not constitute a new notice and shall become effective thirty days after mailing or personal delivery, whichever is sooner, unless the commissioner specifies a later date.

(ii) If the commissioner determines that such additional requirements include the need to obtain a permit, the commissioner will send a notice by certified mail to the person accumulating, treating or storing recyclable materials stating that such person shall obtain a permit, for all the units specified, in accordance with all applicable provisions of section 22a-449(c)-110 of the Regulations of Connecticut State Agencies. Such person shall apply for a permit within no less than sixty days and no more than six months of notice, as specified in the notice, shall at all times use best efforts to obtain such permit, and shall not act in any manner so as to delay or obstruct the proceedings. Such person shall respond to all requests from the commissioner for additional information within the time period specified by the commissioner. If such person wishes to challenge the commissioner's decision imposing additional requirements, he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the commissioner's determination. The commissioner will accept comments on the commissioner's decision during the public comment period referenced under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies, and in any subsequent hearing.

(C) Any requirement imposed pursuant to this subdivision shall be in addition to any other applicable requirement, including but not limited to, requirements in the state hazardous waste management regulations.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002)

Sec. 22a-449(c)-102. Standards applicable to generators of hazardous waste

(a) **Incorporation by Reference**

(1) 40 CFR 262 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 262.20(e) (which relates to a manifest exemption for a small quantity generator);

(B) 40 CFR 262.34(g)(4)(ii) (which relates to certain requirements for generators of F006 waste);

(C) 40 CFR 262, subpart I (which relates to certain facilities in New York);

(D) 40 CFR 262, subpart J (which relates to certain university laboratories in Massachusetts and Vermont).

(2) The following provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 262.11

— after ''must'' in the introductory sentence add '', at least once during each twelve (12) month period or whenever a process generating a waste changes,''

— at the end of paragraph (c)(2) add '', provided that the generator is able to demonstrate clearly how he applied knowledge of the waste in making the determination''

(B) 40 CFR 262.11(d)

— after ''chapter'' add ''and section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(C) 40 CFR 262.20(f)

— delete ''and § 262.32(b)''

— after the second occurrence of ''right-of-way'' add '', provided any such waste remains under the control of the generator at all times and is not delivered to any other person''

— delete ''or transporter'' and replace with '', including a generator who self-transports its hazardous waste''

— delete ''on a public or private right-of-way''

(D) 40 CFR 262.34(a)

— delete ''and (f)'' and replace with ''(f),(g), (h) and (i)''

— immediately following 40 CFR 262.34(a)(1)(iv)(B), delete ''In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for 265.111 and 265.114.''

(E) 40 CFR 262.34(a)(1)(i)

— after '' 40 CFR Part 265'' add '', 40 CFR 264.35 and 40 CFR 264.175''

(F) 40 CFR 262.34(a)(1)(ii)

— delete ''and 265.200''

(G) 40 CFR 262.34(a)(1)(iii)

— delete ''at the facility'' and replace with ''in its files at the location where the waste is generated''

(H) 40 CFR 262.34(a)(1)(iv) introductory paragraph

— delete the paragraph in its entirety and replace with: ''(iv) In containment buildings and the generator complies with 40 CFR 265, subpart DD. Prior to using any such containment building, the generator shall obtain, from a professional engineer, licensed in Connecticut, a written certification that the containment building complies with the design standards specified in 40 CFR 265.1101. The generator shall retain such certification in its files until final closure and shall, upon request by the commissioner, make such certification available for inspection. In addition, the generator shall maintain the following records in its files at the location where the waste is generated:''

(I) 40 CFR 262.34(a)(1)(iv)(A)

— delete ''for the facility''

(J) 40 CFR 262.34(a)(3)

— after ''Hazardous Waste'' add ''and other words that identify the contents of each container or tank, such as ''Flammable'', ''Acid'', ''Alkaline'', ''Cyanide'', ''Reactive'', ''Explosive'', ''Halogenated Solvent'' or the chemical name. Notwithstanding the foregoing, if a generator determines that marking or labeling the identity of the contents of a container with a capacity of less than one gallon is not feasible, in lieu of marking or labeling each such container, a generator shall mark or label the locker, rack or other device used to hold or accumulate any such container with words that identify the contents of each such container such as ''Flammable'', ''Acid'', ''Alkaline'', ''Cyanide'', ''Reactive'', ''Explosive'', ''Halogenated Solvent'' or the chemical name.''

(K) 40 CFR 262.34(a)(4)

— delete ''with 265.16, and with 40 CFR 268.7(a)(5)'' and replace with ''and with 40 CFR 265.16, 265.17, 265.111, 265.113(a), (b) and (c), 265.114 and 268.7(a)(5)''

(L) 40 CFR 262.34(b)

— delete ''a generator'' and replace with ''except as provided for in 40 CFR 262.34(d), (e), (g), (h) and (i), a generator''

(M) 40 CFR 262.34(c)(1)(i)

— delete the entire paragraph and replace with the following: ''(i) Complies with 40 CFR 265.31, 265.171, 265.172, 265.173 and 265.177; and

(N) 40 CFR 262.34(c)(1)(ii)

— delete the word ''either''

— delete ''or with other words that identify the contents of the containers'' after ''Hazardous Waste'' and replace with ''. Each container shall also be marked with other words that identify the contents of such container such as ''Flammable'', ''Acid'', ''Alkaline'', ''Cyanide'', ''Reactive'', ''Explosive'', ''Halogenated Solvent'' or the chemical name. Notwithstanding the foregoing, if a generator determines that marking or labeling the identity of the contents of a container with a capacity of less than one gallon is not feasible, in lieu of marking or labeling each such container, a generator shall mark or label the locker, rack or other device used to hold or accumulate any such container with words that identify the contents of each such container such as ''Flammable'', ''Acid'', ''Alkaline'', ''Cyanide'', ''Reactive'', ''Explosive'', ''Halogenated Solvent'' or the chemical name.''

(O) 40 CFR 262.34(d)(1)

— delete the number ''6000'' and replace with the number ''1000''

(P) 40 CFR 262.34(d)(5)(iv)(C)

— after ''toll free number 800/424-8802).'' add ''Any release that has been reported to the National Response CenterNational Response Center shall still be reported separately to the commissioner using the 24-hour emergency spill response telephone number at (860) 424-3338 or, if that number is unavailable, at (860) 424-3333. In addition to this oral notification, the generator shall comply with all other applicable reporting or notification requirements regarding the release, including but not limited to, reporting required by section 22a-450 of the Connecticut General Statutes.''

(Q) 40 CFR 262.34(f)

— delete the number ''6000'' and replace with the number ''1000''

(R) 40 CFR 262.34(g)(1)

— after ''practices'' add ''(e.g., substitution for less toxic chemicals, improved operating practices, drag-out reduction methods or rinsewater reduction methods)''

— after ''recycling'' add ''and the generator retains documentation demonstrating that such practices have been implemented and have reduced the hazardous substances, pollutants or contaminants entering or otherwise released to the environment.''

(S) 40 CFR 262.34(g)(2)

— after ''recovery'' add ''and the generator retains documentation at the location where the waste is generated demonstrating that the F006 waste is recycled for metals recovery''

(T) 40 CFR 262.34(g)(4)(i)(A)

— after ''40 CFR part 265'' add '', 40 CFR 264.35 and 40 CFR 264.175''

(U) 40 CFR 262.34 (g)(4)(i)(C) introductory paragraph

— delete the paragraph in its entirety and replace with: ''(C) In containment buildings and the generator complies with 40 CFR 265, subpart DD. Prior to using any such containment building, the generator shall obtain, from a professional engineer, licensed in Connecticut, a written certification that the containment building complies with the design standards specified in 40 CFR 265.1101. The generator shall retain such certification in its files until final closure and shall, upon request by the commissioner, make such certification available for inspection. In addition, the generator shall maintain the following records in its files at the location where the waste is generated:''

(V) 40 CFR 262.34(g)(4)(i)(C)(1)

— delete ''for the facility''

(W) 40 CFR 262.34 (g)(4)(iv)

— after ''Hazardous Waste'' add ''and the words ''Wastewater Treatment Sludge''

(X) 40 CFR 262.34(g)(4)(v)

— delete ''with 40 CFR 265.16, and with 40 CFR 268.7(a)(5)'' and replace with ''and with 40 CFR 265.16, 265.17, 265.111, 265.113(a) (b) and (c), 265.114, and 268.7(a)(5)''

(Y) 40 CFR 262.34(h)

— delete each occurrence of ''this waste'' and replace with ''this F006 waste''

(Z) 40 CFR 262.34(i)

— delete each occurrence of ''this waste'' and replace with ''this F006 waste''

(AA) 40 CFR 262.41(a)

— after paragraph (8) add a new paragraph (9) as follows: ''(9) Any other information which the commissioner specifies relating to the generator's activities.''

(BB) 40 CFR 262.42(a)(2)

— delete ''for the Region in which the generator is located''

(CC) 40 CFR 262.42(b)

— delete ''for the Region in which the generator is located''

(DD) 40 CFR 262.43

— delete '', as he deems necessary under sections 2002(a) and 3002(6) of the Act,''

(EE) 40 CFR 262.44

— in paragraph (a), delete ''(a), (c), and (d)'' after ''Section 262.40''

(FF) 40 CFR 262.70

— at the end of the paragraph add ''and with any applicable federal, state, or local law which is more stringent than the pesticide label.''

(GG) 40 CFR 262 Appendix, Form 8700-22

— in the upper right-hand corner, after ''Information in the shaded areas is not required by Federal law'' add ''but is required by State law.''

(HH) 40 CFR 262 Appendix, Instructions for Form 8700-22, Item 20

— delete the second paragraph beginning with ''Items A-K are not required by Federal regulations...'' and replace with ''Items A-K are required in the State of Connecticut.''

(II) 40 CFR Appendix to Part 262

— replace all references to ''Federal regulations'' with ''federal and state of Connecticut regulations''

(3) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsections (b) and (c) of this section shall apply.

(b) **Generators**

(1) A generator shall not offer his hazardous waste to a transporter who does not have a current valid transporter permit issued by the commissioner pursuant to section 22a-449(c)-11 of the Regulations of Connecticut State Agencies or section 22a-454 of the Connecticut General Statutes.

(2) Generators shall comply with the standards of 40 CFR 265.15 for all storage areas.

(3) Any generator who is located outside of Connecticut who manifests a shipment to Connecticut and, except as provided in 40 CFR 262.21, any generator located in Connecticut who manifests a shipment to a destination within or outside of Connecticut shall use the manifest specified in this section.

(A) The manifest shall consist of at least the number of copies designated by the commissioner, and such copies, when properly completed, shall be sent to those persons specified in 40 CFR 262.22 and the additional persons specified by the commissioner on the manifest form. All copies of the manifest shall be legibly completed.

(B) If Connecticut is the state in which the generator is located or the state to which the shipment of hazardous waste is manifested, the generator shall send a copy of the manifest to the commissioner within seven days of the date on which the transporter accepts and signs the manifest.

(C) If the designation or instruction to the transporter referred to in 40 CFR 262.20(d) is made orally, it shall be followed by a written communication to the transporter and the commissioner within three days, giving the same instructions.

(4) Primary Exporters shall comply with the Notifications of Intent to Export, Exception Reports, and Annual Reports Requirements in 40 CFR 262.53, 262.55, and 262.56 respectively.

(c) **Small Quantity Generators**

A small quantity generator as defined in section 22a-449(c)-100(c)(28) of the Regulations of Connecticut State Agencies shall: (1) not accumulate hazardous waste in anything other than a tank or container; (2) not operate uncovered tanks; (3) comply with the following requirements in 40 CFR 262: 262.11-12, Subpart B, 262.30 to 33, inclusive, 262.34(c) to (f), inclusive, 262.44 and Subparts E, F and G; and (4) comply with 40 CFR 264.175, 40 CFR 265.111, 40 CFR 265.113(a), (b) and (c), 40 CFR 265.114 and subsection (b) of this section.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002)

Sec. 22a-449 (c)-103. Standards applicable to transporters of hazardous waste

(a) **Incorporation by Reference**

(1) 40 CFR Part 263 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the following provisions which are not incorporated:

(A) 40 CFR 263.10(f) (which relates to transportation of waste military munitions).

(B) 40 CFR 263.12 (which allows transporters to store hazardous waste for a period of ten days without being subject to regulation under 40 CFR Parts 270, 264, 265 and 268).

(C) 40 CFR 263.20 (h) (which exempts a transporter from complying with 263.20 provided he is transporting waste from a small quantity generator that has a reclamation agreement).

(2) The following provisions are incorporated by reference with the specified changes:

(A) 40 CFR 263.10(a)

— at the end of the paragraph add the following: ''In addition, transporters transporting hazardous waste pursuant to 40 CFR 262.20(f) shall comply with 40 CFR 263.30 and 40 CFR 263.31.''

(B) 40 CFR 263.20 (g) (4)

—after ''United States'' add ''and send a copy of the manifest to the Commissioner within thirty days of the date the waste left the United States.''

(C) 40 CFR 263.30 (b)

—delete ''an official (State or local government or a Federal Agency)'' and replace with ''the Commissioner or an official of a Federal Agency''

—after ''EPA identification numbers'' add ''or DEP Transporter Permits

—at the end of the paragraph add ''The waste must be disposed of in accordance with these regulations.''

(D) 40 CFR 263.30 (c)(1)

— after the telephone number for the National Response Center add ''and give notice to the Commissioner, using the 24-hour Emergency Spill Response telephone number at (860) 424-3338 or, if that number is incorrect, the telephone number listed for Emergency Spill Response with the telephone company.''

(E) 40 CFR 263.31

—after ''local officials'' add ''(to the extent that actions required or approved by local officials are consistent with those required or approved by Federal or State officials)''

(3) 49 CFR Parts 171 through 179 inclusive are incorporated by reference in their entirety.

(4) In addition to the provisions incorporated above, the following more stringent provisions in this section shall apply.

(b) **Storage**

(1) A transporter who stores hazardous waste which is not in or on a vehicle, trailer, or other means of conveyance is subject to these regulations, including but not limited to Sections 104, 105, 106, 108, and 110, with respect to the storage of those wastes.

(2) No transporter may store hazardous waste in or on a vehicle, trailer, or other means of conveyance which is not in transit to the designated facility, for longer than 72 hours without the written approval of the Commissioner. The Commissioner shall not approve any such storage for a period longer than ten days, except by issuance of a permit pursuant to Section 110 of these regulations.

(c) **Vehicles**

(1) Each vehicle shall display the number of the permit issued by the Commissioner pursuant to section 22a-449 (c)-11 of the Regulations of Connecticut State Agencies on the sides and rear of the tank, or waste-carrying portion of the vehicle, in letters and numbers the color of which contrasts with the background and which are at least ten centimeters high.

(2) The Commissioner may inspect vehicles and their contents at any reasonable time.

(d) **Training**

In addition to any other applicable requirements regarding training, all personnel engaged in the handling or transport of hazardous wastes shall be trained in proper emergency response for the types of waste being transported. Such training shall, at a mimimum, cover: required safety equipment and uses; first aid in the event of accidents with the waste; hazards involved with loading and unloading; the manifest system and the terms used; the physical and chemical properties of the waste being transported; and emergency procedures for the waste being transported.

(e) **Financial Responsibility**

Each applicant for a permit under section 22a-449 (c)-11 of the Regulations of Connecticut State Agencies to transport hazardous waste shall demonstrate that he meets the requirements specified in 49 CFR 387 Subpart A, and each permittee shall continue to meet those requirements throughout the permit term.

(Effective July 17, 1990; amended June 27, 2002)

Sec. 22a-449(c)-104. Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities

(a) **Incorporation by Reference**

(1) 40 CFR 264 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 264.1(d) (which relates to underground injection);

(B) 40 CFR 264.1(f) (which relates to the requirements of 40 CFR 264);

(C) 40 CFR 264.1(g)(12) (which relates to project XL for utilities in New York);

(D) 40 CFR 264.1(i) (which relates to storage of waste military munitions);

(E) 40 CFR 264.1(j) (which relates to the applicability of certain portions of 40 CFR 264);

(F) 40 CFR 264.90(b) (which provides for an exemption for certain types of units for releases into the uppermost aquifer);

(G) 40 CFR 264.90(e) (which relates to the applicability of 40 CFR 264, subpart F);

(H) 40 CFR 264.90(f) (which relates to 40 CFR 264, subpart F alternatives);

(I) 40 CFR 264.101(d) (which relates to the applicability of 40 CFR 264.101);

(J) 40 CFR 264.110(c) (which relates to alternative closure requirements);

(K) 40 CFR 264.112(b)(8) (which relates to certain closure plan requirements);

(L) 40 CFR 264.112(c)(2)(iv) (which relates to certain closure plan changes);

(M) 40 CFR 264.118(b)(4) (which relates to certain post-closure plan requirements);

(N) 40 CFR 264.118(d)(2)(iv) (which relates to certain post-closure plan changes);

(O) 40 CFR 264.140(d) (which relates to alternative financial requirements);

(P) 40 CFR 264.149 (which relates to state-required financial mechanisms);

(Q) 40 CFR 264.301(l) (which relates to landfills located in the state of Alabama);

(R) 40 CFR 264.314(d)(1)& (3)

(which relates to placing free liquids in landfills); and

(S) 40 CFR 264.314(e) (which relates to sorbents used to treat free liquids);

(T) 40 CFR 264.340(b) (which relates to MACT standards);
(U) 40 CFR 264.554 (which relates to staging piles);
(V) 40 CFR 264.1080(e), (f) and (g) (which relate to a facility in West Virginia);
(W) 40 CFR 264, subpart EE (which relates to the storage of hazardous waste munitions and explosives).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 264.1(g)(2)
— delete ''c, d, f, or g'' and replace with ''c, f, g and h''

(B) 40 CFR 264.1(g)(11) introductory paragraph
— after each occurrence of ''handling'' add ''or transporting''
— in the second sentence, after ''handlers'' add ''and transporters''
— after ''273'' add ''and section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(C) 40 CFR 264.1(g)(11)(iii)
— delete ''and''

(D) 40 CFR 264.1(g)(11)(iv)
— delete the period and replace with ''; and''
— add a new paragraph (v) as follows: ''(v) used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies.''

(E) 40 CFR 264.11
— delete ''(45 FR 12746)''

(F) 40 CFR 264.13(c)(3)
— delete ''a biodegradable sorbent to the waste in the container'' and replace with ''a non-biodegradable sorbent in accordance with 40 CFR 264.316(b)''

(G) 40 CFR 264.70
— delete '', and to owners and operators of off-site facilities with respect to waste military munitions exempted from manifest requirements under 40 CFR 266.203(a). Section 264.73(b)'' and replace with ''. 40 CFR 264.73(b)(9)''

(H) 40 CFR 264.71(a)(4)
— after ''generator'' add '', generator state and consignment state''

(I) 40 CFR 264.71(b)(4)
— after each ''generator'' add '', generator state and consignment state''

(J) 40 CFR 264.73(b)(7)
— delete ''and''

(K) 40 CFR 264.73(b)(15)
— delete the last ''and''

(L) 40 CFR 264.73(b)(17)
— delete the paragraph in its entirety and replace with the following: ''(17) Any other information required by section 22a-449(c)-104 of the Regulations of Connecticut State Agencies to be maintained in the operating record.''

(M) 40 CFR 264.75
— after paragraph (j), add a new paragraph (k) as follows: ''(k) Any other information which the commissioner specifies relating to the facility's activities. The commissioner shall specify such information in writing prior to submission of the report.''

(N) 40 CFR 264.90(a)(1)
— delete ''except as provided in paragraph (b) of this section, the'' and replace with ''the''

(O) 40 CFR 264.101(a)

— delete ''from any solid waste management unit''

— delete ''at which waste was placed in the unit'' and replace with ''such release occurred''

(P) 40 CFR 264.143(h)

— delete ''If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrator of all such Regions.'' and replace with ''If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance submitted for such facilities to any other EPA regional office or state agency regulating hazardous waste shall be submitted to the commissioner.''

(Q) 40 CFR 264.145(f)(11)

— delete ''direct of higher-tier'' and replace with ''direct or higher-tier''

(R) 40 CFR 264.145(h)

— delete ''If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrator of all such Regions.'' and replace with ''If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance that is submitted for such facilities to any other EPA regional office or state agency regulating hazardous waste shall be submitted to the commissioner.''

(S) 40 CFR 264.151(g)

— in the letter entitled ''Letter From Chief Financial Officer'', in the fourth line of the third paragraph delete ''of ''both'' and replace with ''or ''both''

— in the letter entitled ''Letter From Chief Financial Officer'', in the eighth line of the paragraph numbered ''3'', delete ''subpart H or'' and replace with ''subpart H of''

— in the letter entitled ''Letter From Chief Financial Officer'', under ''Alternative I'' delete ''*3. Current $_____.'' and replace with ''*3. Current liabilities _____.''

(T) 40 CFR 264.151(h)(2)

— under ''Guarantee For Liability Coverage'', in the sixteenth line delete ''or'' and replace with ''of''

— under ''Guarantee For Liability Coverage'', in the twentieth line delete ''264.141(h)'' and replace with ''264.141(h) or 265.141(h)''

— under ''Certification of Valid Claim'', in the eighth line delete ''or disposal facility'' and replace with ''or disposal facility]''

(U) 40 CFR 264.151

— add the following paragraph at the end of the section: ''(o) Whenever 40 CFR 264.151 requires that owners and operators of facilities in more than one state provide notice of their financial obligations to several regional administrators or to several state agencies regulating hazardous waste, such owner or operator shall provide the required notice to both the Commissioner of Environmental Protection and to all such regional administrators or state agencies regulating hazardous waste.''

(V) 40 CFR 264.175(b)(1)

— delete ''underly'' and replace with ''underlie''

(W) 40 CFR 264.192(d)

— after ''performed'' add ''and the tank system shall successfully pass a test for tightness''

(X) 40 CFR 264.193(c)

— in the Note, after each ''as amended'' add ''and chapter 446k of the Connecticut General Statutes''

(Y) 40 CFR 264.196(b)(1)

— after ''demonstrates'' add ''to the Commissioner and the Commissioner agrees''

— at the end of the paragraph add ''The owner or operator shall make all reasonable efforts to mitigate the effect of the release.''

(Z) 40 CFR 264.196(d)(1)

— delete ''Regional Administrator within 24 hours of'' and replace with ''commissioner immediately upon''

— delete ''If the release has been reported pursuant to 40 CFR Part 302, that report will satisfy this requirement'' and replace with ''Any release that has been reported to the National Response Center pursuant to 40 CFR 302, shall still be reported separately to the commissioner using the 24-hour Emergency Spill Response telephone number at (860) 424-3338 or, if that number is unavailable, at (860) 424-3333. In addition to this oral notification, the owner or operator shall comply with all other applicable reporting or notification requirements regarding the release, including but not limited to, reporting required by section 22a-450 of the Connecticut General Statutes.''

(AA) 40 CFR 264.222(a)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

(BB) 40 CFR 264.252(a)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

— delete ''surface impoundment'' and replace with ''waste pile''

(CC) 40 CFR 264.272(a)

— after ''degraded'' add ''or'' and delete ''or immobilized''

(DD) 40 CFR 264.272(c)(2)

— after ''degraded'' add ''or'' and delete ''or immobilized''

(EE) 40 CFR 264.301(c)(2)

— delete ''paragraphs (3)(c)(iii) and (iv)'' and replace with ''paragraphs (c)(3)(iii) and (iv)''

(FF) 40 CFR 264.302(a)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

— delete ''surface impoundment'' and replace with ''landfill''

(GG) 40 CFR 264.316(b)

— after ''a sufficient quantity of'' add ''nonbiodegradable''

— delete '', determined to be nonbiodegradable in accordance with § 264.314(e),''

— at the end of the paragraph add ''For purposes of this paragraph, nonbiodegradable sorbents are (i) inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon); or (ii) high molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene and tertiary butyl copolymers); or (iii) mixtures of these nonbiodegradable materials. A sorbent is also nonbiodegradable if it is determined to be nonbiodegradable under any of the following tests: (i) ASTM Method G21-70 (1984a)-Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or (ii) ASTM Method G22-76 (1984b)-Standard Practice for Determining Resistance of Plastics to Bacteria; or (iii) OECD test 301B: (CO_2

Evolution Modified Strum Test). Nonbiodegradable sorbents do not include polymers derived from biological material or polymers specifically designed to be degradable.''

(HH) 40 CFR 264.340(c) introductory paragraph

— delete ''must'' and replace with ''may''

(II) 40 CFR 264.340(d)

— delete ''(b)(1)(i)'' and replace with ''(c)(1)(i)''

(JJ) 40 CFR 264.552(a)

-- delete the introductory paragraph in its entirety and replace with the following: ''The requirements of 40 CFR 264.552 shall apply to areas at a facility that, for purposes of implementing remedies under 40 CFR 264.101 or section 22a-449(c)-105(h) of the Regulations of Connecticut State Agencies, the commissioner designates as a corrective action management area or ''CAMU''. A CAMU shall be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. The commissioner may designate one or more areas at a facility as a CAMU.

In order for the commissioner to designate an area at a facility as a CAMU, the owner or operator of the facility shall submit to the commissioner information demonstrating how the CAMU complies with the requirements of 40 CFR 264.552, including 40 CFR 264.552(c)(1) to (7), inclusive, and a proposal regarding the design, operation, and closure of the CAMU, including any post-closure requirements that, at a minimum, includes the information specified in 40 CFR 264.552(e)(1) to (4), inclusive. The owner or operator shall provide the commissioner with any additional information that the commissioner deems necessary regarding the potential designation of an area at a facility as a CAMU. A CAMU shall either be designated in a permit issued pursuant to section 22a-449(c)-110 of the Regulations of Connecticut State Agencies or, for facilities operating under interim status, in an order issued by the commissioner.''

(KK) 40 CFR 264.552(a)(1)

— after ''hazardous wastes'' add '', although the Commissioner may, at his discretion, apply the land disposal restrictions in 40 CFR 268 to the placement of such wastes''

(LL) 40 CFR 264.552(a)(2)

— after ''requirements'' add '', although the Commissioner may, at his discretion, apply the minimum technology requirements to a CAMU''

(MM) 40 CFR 264.552(b)(2)

— delete ''to that portion of the CAMU after incorporation into the CAMU'' and replace with ''to the entire CAMU designated by the commissioner. In addition, the commissioner may, at his discretion, apply any requirement or all the requirements of 40 CFR 264, subpart B, C, D, E, BB or CC to any regulated unit that the commissioner designates as a CAMU under 40 CFR 264.552(b)''

(NN) 40 CFR 264.552(c) introductory paragraph

— delete ''designate a CAMU in accordance with the following'' and replace with ''utilize the following criteria in determining whether to designate a CAMU''

(OO) 40 CFR 264.552(c)(4)

— delete '', to the extent practicable''

(PP) 40 CFR 264.552(c)(5)

— delete '', when appropriate and practicable''

(QQ) 40 CFR 264.552(e)

— delete ''permit or order'' and replace with ''permit or, for a facility operating under interim status, in an order the design, operating, closure, and, if necessary, the post-closure''

— add a new paragraph (5) as follows: ''(5) Any requirement that the commissioner deems necessary to protect human health or the environment, including but not limited to, application of financial responsibility requirements.''

(RR) 40 CFR 264.552(e)(4)(i)(B)

— delete ''for areas where waste remains in place,''

— after ''surface waters,'' add ''groundwaters''

(SS) 40 CFR 264.552(e)(4)(iii)(F)

delete ''.'' and replace with '';''

— add a new paragraph (G) as follows: ''(G) Any other factor that the commissioner deems necessary to protect human health and the environment.''

(TT) 40 CFR 264.552(e)(4)(iv)

— delete ''for areas where wastes will remain in place''

(UU) 40 CFR 264.552(g)

— after ''CAMU'' add ''and any modification to the incorporation of or requirements regarding any such CAMU''

— at the end of the paragraph add the following: ''public participation procedures equivalent to those specified in 40 CFR 270.42 shall be followed regarding the designation of a CAMU in an order and any subsequent modifications to any such order regarding a CAMU.''

(VV) 40 CFR 264.552(h)

— after ''decisions.'' add ''In addition, the designation of a CAMU does not affect an owner or operator's requirement to comply with all applicable state requirements, including but not limited to, compliance with sections 22a-133k-1 to 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies.''

(WW) 40 CFR 264.553(a)

-- delete the introductory paragraph in its entirety and replace with the following: ''The requirements of 40 CFR 264.553 shall apply to the designation by the commissioner, for purposes of implementing remedies under 40 CFR 264.101 or section 22a-449(c)-105(h) of the Regulations of Connecticut State Agencies, of alternative requirements for temporary tanks or container storage areas used for treatment or storage of remediation wastes. Such alternative requirements may replace the requirements otherwise applicable to any such tank or container storage area. Any such temporary tank or container storage area used for treatment or storage of remediation waste must, however, be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the temporary unit originated.

In order for the commissioner to designate alternative requirements for a temporary tank or container storage area used for treatment or storage of remediation wastes, the owner or operator of any such tank or container storage area shall submit to the commissioner a detailed plan demonstrating how proposed alternative requirements comply with the requirements of 40 CFR 264.553, and a proposal regarding the design, operation, and closure of any such tank or container storage area, including any post-closure requirements that, at a minimum, addresses the items in 40 CFR 264.553(c). The owner or operator shall provide the commissioner with any additional information that the commissioner deems necessary regarding the potential designation of alternative requirements for any such temporary tank or container storage area. The alternative requirements for a temporary tank or container storage area used for treatment or storage of remediation wastes shall be designated either in a permit issued pursuant to section 22a-449(c)-110 of the Regulations of Connecti-

cut State Agencies or, for facilities operating under interim status, in an order issued by the commissioner.''

(XX) 40 CFR 264.553(c)(7)

— delete the ''.'' and replace with ''; and''

— add a new paragraph (8) as follows: ''(8) Any other factor that the commissioner deems necessary to protect human health and the environment.''

(YY) 40 CFR 264.553(d)

— after ''permit or'' add '', for a facility operating under interim status, in the''

— delete ''and closure'' and replace with '', closure and, if necessary, post-closure''

— after the last sentence add: ''The commissioner may specify any condition that the commissioner deems necessary to protect human health or the environment regarding a temporary unit, including, but not limited to, application of financial responsibility requirements.''

(ZZ) 40 CFR 264.553(e)

— after ''permit or'' add '', for a facility operating under interim status, in the''

(AAA) 40 CFR 264.553(f)

— add a new sentence before the introductory paragraph as follows: ''Public participation procedures equivalent to those specified in 40 CFR 270.42 shall be followed regarding the commissioner's designation, in an order, of alternative requirements, or any subsequent modification to any such requirements, for a temporary tank or container storage area used for treatment or storage of remediation waste pursuant to 40 CFR 264.553.''

— after the second occurrence of ''temporary unit'' add ''or the modification of any alternative requirement designated by the commissioner''

(BBB) 40 CFR 264.570(a)

— delete the entire paragraph and replace with the following: ''(a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, or surface water run-off to an associated collection system.

(1) For drip pads used for the management of wastes specified in 40 CFR 261.31 as F032:

(i) existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990; and

(ii) the requirement at 40 CFR 264.573(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992, except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

(2) For drip pads used for management of hazardous wastes other than hazardous waste specified in 40 CFR 261.31 as F032:

(i) existing drips pads are those constructed before October 31, 2001 and those for which the owner or operator has a design and has entered into binding financial or other agreement for construction prior to October 31, 2001. All other drip pads are new drip pads; and

(ii) the requirement at 40 CFR 264.573(b)(3) to install a leak collection system applies only to those drip pads that are constructed October 31, 2001, except for those drip pads constructed after October 31, 2001 for which the owner or operator has a design and has entered into binding financial or other agreement for construction prior to October 31, 2001.''

(CCC) 40 CFR 264.570(c)(1)(iv)

— delete ''Federal'' and replace with ''state of Connecticut''

(DDD) 40 CFR 264.573(a)(4)(i)

— delete ''§ 264.572(a) instead of § 264.572(b)'' and replace with ''40 CFR 264.572(b) instead of 40 CFR 264.572(a)''

(EEE) 40 CFR 264.573(b)

— delete ''§ 264.572(b) instead of § 264.572(a)'' and replace with ''40 CFR 264.572(a) instead of 40 CFR 264.572(b)''

(FFF) 40 CFR 264.601 introductory text

— after ''provisions as'' add ''the commissioner deems necessary''

— delete ''are appropriate'' and replace with ''the commissioner deems necessary''

(GGG) 40 CFR 264.1030(c)

— delete ''under § 124.15 or reviewed under § 270.50''

(HHH) 40 CFR 264.1033(*l*) introductory paragraph

— delete ''by implementing the following requirements''

(III) 40 CFR 264.1033(*l*)(1)

— delete ''in accordance with the following requirements'' and replace with ''to ensure proper operation and maintenance of such system. At a minimum, such monitoring and inspection shall include compliance with the following requirements''

(JJJ) 40 CFR 264.1033(*l*)(1)(ii)(A)

— in the second sentence delete ''following any'' and replace with ''each''

(KKK) 40 CFR 264.1033(1)(2)

— delete ''in accordance with the following requirements'' and replace with ''to ensure proper operation and maintenance of such system. At a minimum, such monitoring and inspection shall include compliance with the following requirements''

(LLL) 40 CFR 264.1034(f)

— after ''knowledge of the waste,'' add ''the owner or operator shall, within thirty days, or another time period approved by the commissioner in writing, implement''

— delete ''may be used'' and replace with ''or another approach that the commissioner approves in writing''

(MMM) 40 CFR 264.1050(c)

— delete ''under § 124.15 or reviewed under § 270.50''

(NNN) 40 CFR 264.1063(f)

— after ''weight,'' add ''the owner or operator shall comply with''

— delete ''can be used'' and replace with ''or another approach that the commissioner approves in writing''

(OOO) 40 CFR 264.1080(b)(3)

— after ''plan'' add '', provided the owner or operator has complied with or remains in compliance with the closure plan approved by the commissioner''

(PPP) 40 CFR 264.1080(b)(4)

— after ''plan'' add '', provided the owner or operator has complied with or remains in compliance with the closure plan approved by the commissioner''

(QQQ) 40 CFR 264.1080(b)(7)

— delete ''in accordance with'' and replace with ''in compliance with''

(RRR) 40 CFR 264.1080(c)

— delete the paragraph in its entirety and replace with the following ''(c) Notwithstanding 40 CFR 264.1080(a), the requirements of 40 CFR 265, subpart CC shall

apply to a hazardous waste management unit that would otherwise be subject to the requirements of 40 CFR 264, subpart CC provided:

(1) the owner or operator of the facility was issued a permit by the commissioner, pursuant to section 22a-449(c)-110 of the Regulations of Connecticut State Agencies, prior to December 6, 1996;

(2) the permit issued by the commissioner included the unit that would otherwise be subject to 40 CFR 264, subpart CC; and

(3) the permit itself does not require compliance with the requirements of 40 CFR 264, subpart CC.

Provided, and only if, all three of these conditions are satisfied, the requirements of 40 CFR 265, subpart CC shall apply until any permit described in 40 CFR 264.1080(c) is renewed. The requirements of 40 CFR 264, subpart CC shall apply if and when any permit described in 40 CFR 264.1080(c) is renewed.''

(SSS) 40 CFR 264.1080(d) introductory paragraph

— delete ''are administratively stayed for'' and replace with ''shall not apply to''

— delete ''when'' and replace with ''provided''

— delete ''meets'' and replace with ''has complied with and remains in compliance with''

(TTT) 40 CFR 264.1080(d)(1)

— after ''identifies'' add '', in writing as part of documentation prepared and maintained pursuant to 40 CFR 264.1089(i),''

(UUU) 40 CFR 264.1080(d)(3)

— after ''the facility owner or operator'' add ''and shall note that documentation prepared in compliance with 40 CFR 264.1080(d)(2) and 264.1089(i) shall be made available if requested by the commissioner''

(VVV) 40 CFR 264.1081

— delete ''the Act,''

(WWW) 40 CFR 264.1082(b)

— delete ''each hazardous waste management unit'' and replace with ''each tank, surface impoundment, and container''

(XXX) 40 CFR 264.1082(c)(2)

— after ''has been reduced'' add ''or destroyed''

(YYY) 40 CFR 264.1082(c)(2)(vii)

— delete ''has either''

(ZZZ) 40 CFR 264.1082(c)(2)(vii)(A)

— delete ''Been issued a final permit'' and replace with ''has a currently valid and effective permit issued by the commissioner''

(AAAA) 40 CFR 264.1082(c)(2)(viii)

— delete ''has either''

(BBBB) 40 CFR 264.1082(c)(2)(viii)(A)

— delete ''Been issued a final permit'' and replace with ''has a currently valid and effective permit issued by the commissioner''

(CCCC) 40 CFR 264.1082(c)(5)(i)

— after ''Waste Operations'' add ''and all applicable state air pollution control requirements''

(DDDD) 40 CFR 264.1082(c)(5)(iii)

— after ''appendix B'' add ''and all applicable state air pollution control requirements''

— after the second occurrence of ''Total Enclosure'''' add ''in 40 CFR 52.741, appendix B''

(EEEE) 40 CFR 264.1082(d)(2)(ii)
— after ''appropriate method'' add ''and the owner or operator shall perform a waste determination using the method specified by the commissioner''
(FFFF) 40 CFR 264.1083(a)(1)(i)
— delete ''An initial'' and replace with ''An owner or operator shall perform an initial''
— delete each occurrence of ''shall be made''
— after ''thereafter'' add ''an owner or operator shall perform''
(GGGG) 40 CFR 264.1083(a)(1)(ii)
— delete ''Perform'' add ''An owner or operator shall perform''
(HHHH) 40 CFR 264.1083(b)(1)(i)
— delete ''An initial'' and replace with ''An owner or operator shall perform an initial''
— delete ''shall be made''
— after ''thereafter'' add ''an owner or operator shall''
(IIII) 40 CFR 264.1083(b)(1)(ii)
— delete ''Perform'' and replace with ''An owner or operator shall perform''
(JJJJ) 40 CFR 264.1084(c)
— delete ''meet'' and replace with ''comply with''
(KKKK) 40 CFR 264.1084(c)(1)
— delete ''a hazardous waste'' and replace with ''each hazardous waste''
(LLLL) 40 CFR 264.1084(c)(2)
— delete ''designed to meet'' and replace with ''that meets''
(MMMM) 40 CFR 264.1084(c)(2)(i)
— delete ''be designed to''
(NNNN) 40 CFR 264.1084(c)(2)(ii)
— after ''installed'' add ''and maintained''
(OOOO) 40 CFR 264.1084(e)
— delete ''meet'' and replace with ''comply with''
(PPPP) 40 CFR 264.1084(f)
— delete ''meet'' and replace with ''comply with''
(QQQQ) 40 CFR 264.1084(f)(1)
— delete ''design the external floating roof in accordance with'' and replace with ''ensure that an external floating roof meets''
(RRRR) 40 CFR 264.1084(f)(1)(i)
— delete ''be designed to''
(SSSS) 40 CFR 264.1084(f)(1)(ii)(A)
— delete ''the metallic shoe seal shall be designed so that one end extends'' and replace with ''one end of the metallic shoe seal shall extend''
— delete ''other end extends'' and replace with ''other end shall extend''
(TTTT) 40 CFR 264.1084(g)
— delete ''meet'' and replace with ''comply with''
(UUUU) 40 CFR 264.1084(g)(3)(iii)
— delete ''perform the inspections'' and replace with ''inspect the air emission control equipment''
(VVVV) 40 CFR 264.1084(h)
— delete ''meet'' and replace with ''comply with''
(WWWW) 40 CFR 264.1084(h)(1)
— delete ''be designed not to'' and replace with ''not''
(XXXX) 40 CFR 264.1084(h)(3)

— delete ''or the following conditions as'' and replace with ''condition

(YYYY) 40 CFR 264.1084(i)

— delete ''meet'' and replace with ''comply with''

(ZZZZ) 40 CFR 264.1084(i)(1)

— after ''appendix B'' add ''and all applicable state air pollution control requirements''

— after the second reference to ''Total Enclosure'''' add ''under 40 CFR 52.741, Appendix B''

(AAAAA) 40 CFR 264.1084(1) introductory paragraph

— delete ''subpart'' and replace with ''40 CFR 264.1084''

(BBBBB) 40 CFR 264.1084(l)(1)(ii)

— delete ''the procedures specified in the applicable section of this subpart'' and replace with ''the applicable procedures in 40 CFR 264.1084''

— at the end of the paragraph add the following: ''This written plan and schedule and the results of all inspections shall be maintained in the facility operating record.''

(CCCCC) 40 CFR 264.1085(b)

— delete ''the surface impoundment'' and replace with ''each surface impoundment subject to this section''

— after ''installing'' add '', maintaining''

(DDDDD) 40 CFR 264.1085(c)

— delete ''meet'' and replace with ''comply with''

(EEEEE) 40 CFR 264.1085(c)(1)

— delete ''designed to meet the following specifications'' and replace with ''that complies with the following requirements''

(FFFFF) 40 CFR 264.1085(c)(1)(i)

— delete ''be designed to''

(GGGGG) 40 CFR 264.1085(c)(3)(ii)

— delete ''perform the inspections'' and replace with ''inspect the floating membrane cover and its closure devices''

(HHHHH) 40 CFR 264.1085(d)

— delete ''meet'' and replace with ''comply with''

(IIIII) 40 CFR 264.1085(d)(1)(i)

— delete ''be designed to''

(JJJJJ) 40 CFR 264.1085(d)(1)(ii)

— delete each occurrence of ''be designed to''

(KKKKK) 40 CFR 264.1085(d)(3)(iii)

— delete ''perform the inspections'' and replace with ''inspect the air emission control equipment''

(LLLLL) 40 CFR 264.1085(g)

— delete ''subpart'' and replace with ''40 CFR 264.1085''

(MMMMM) 40 CFR 264.1085(g)(2)

— delete ''the procedures specified in the applicable section of this subpart'' and replace with ''the applicable procedures in 40 CFR 264.1085''

— at the end of the paragraph add the following: ''This written plan and schedule and the results of all inspections shall be maintained in the facility operating record.''

(NNNNN) 40 CFR 264.1086(c)(4)(iii)

— after ''removed from the container and'' add ''placed in a container that complies with the requirements of 40 CFR 264.1086.''

— delete the third occurrence of ''the container'' and replace with ''The defective container''

(OOOOO) 40 CFR 264.1086(d)(4)(iii)

— after ''removed from the container and'' add ''placed in a container that complies with the requirements of 40 CFR 264.1086.''

— delete the third occurrence of ''the container'' and replace with ''The defective container''

(PPPPP) 40 CFR 264.1086(e)(2)

— delete ''meet'' and replace with ''comply with''

(QQQQQ) 40 CFR 264.1086(e)(2)(i)

— after ''appendix B'' add ''and any applicable state air pollution control requirements''

— after the second occurrence of ''Total Enclosure'' add ''under 40 CFR 52.741, appendix B''

(RRRRR) 40 CFR 264.1086(e)(4)

— delete ''subpart'' and replace with ''40 CFR 264.1086''

(SSSSS) 40 CFR 264.1086(g)(1)

— delete ''Each potential'' and replace with ''For purposes of determining whether a container operates with no detectable emissions, the owner or operator shall check each potential''

— delete '', shall be checked''

(TTTTT) 40 CFR 264.1086(g)(2)

— delete ''The test shall be performed'' and replace with ''In determining whether a container operates with no detectable emissions, the owner or operator shall perform the test''

(UUUUU) 40 CFR 264.1086(h)

— delete ''Procedure for determining a container to be'' and replace with ''In determining whether a container is''

— after ''section'' add '', the following shall apply''

(VVVVV) 40 CFR 264.1087(b)

— delete ''The closed-vent system shall meet'' and replace with ''The owner or operator of a closed-vent system shall comply with''

(WWWWW) 40 CFR 264.1087(b)(1)

— delete ''meets'' and replace with ''complies with''

(XXXXX) 40 CFR 264.1087(c)

— at the beginning of the paragraph add the following: ''Except as is provided for in 40 CFR 264.1087(c)(2), a control device shall comply with the applicable specifications and requirements in 40 CFR 264.1087(c)(1)(i) to (iii), inclusive, at all times when gases, vapors or fumes are vented from the waste management unit through the closed vent system to the control device.''

— delete ''The control device shall meet'' and replace with ''The owner or operator of a control device shall comply with''

(YYYYY) 40 CFR 264.1087(c)(2)(vi)

— delete ''operate the closed-vent system such that'' and replace with ''not allow''

— delete ''are not actively vented'' and replace with ''to be vented''

(ZZZZZ) 40 CFR 264.1087(c)(3)(ii)

— at the beginning of the paragraph add the following: ''The owner or operator shall determine whether carbon removed from a control device is a hazardous waste in accordance with 40 CFR 262.11.''

(AAAAAA) 40 CFR 264.1087(c)(6)

— after ''design analysis'' add ''as specified in 40 CFR 264.1087(c)(5)(iv), then such design analysis cannot be used to demonstrate compliance with the requirements

of 40 CFR 264.1087 and within sixty (60) days of being notified of such disagreement, the owner or operator shall perform a performance test as specified in 40 CFR 264.1087(c)(5)(iii).''

— delete ''then the disagreement shall be resolved using the'' and replace with ''The''

— after ''section'' add ''shall be used to determine compliance with 40 CFR 264.1087''

(BBBBBB) 40 CFR 264.1088(b)

— after ''40 CFR 264.15'' add '', including recording inspections in accordance with 40 CFR 264.15(d)''

(CCCCCC) 40 CFR 264.1089(a)

— delete ''a minimum of three years'' and replace with ''the facility until closure of the facility''

— in the third sentence delete ''operating record until the'' and replace with ''operating record for a minimum of three years after any''

(DDDDDD) 40 CFR 264.1089(b)(1)(ii)(A)

— after ''conducted'' add '', the name of the inspector and a notation of any observations made during the inspection''

(EEEEEE) 40 CFR 264.1089(b)(2)(i)

— after ''collected,'' add ''the name of the person taking the samples, a description of the sampling methodology,''

(FFFFFF) 40 CFR 264.1089(b)(2)(iii)(B)

— after ''performed,'' add ''the name of the person taking the measurements, a description of the device(s) used to take the measurements,''

(GGGGGG) 40 CFR 264.1089(c)(3)(i)

— after ''conducted'' add '', the name of the inspector and a notation of any observations made during the inspection''

(HHHHHH) 40 CFR 264.1089(i) introductory paragraph

— after ''shall be provided'' add ''in the facility operating record''

(IIIIII) 40 CFR 264.1090(a)

— delete ''when hazardous waste is placed in the waste management unit in'' and replace with ''of''

— in the third sentence after ''written report'' add ''to the Commissioner''

— after ''becomes aware'' add ''or should have become aware''

— after ''contain the'' add ''the facility's''

(JJJJJJ) 40 CFR 264.1090(b)

— delete ''when hazardous waste is managed in a tank in'' and replace with ''of''

— in the second sentence after ''written report'' add ''to the Commissioner''

— after ''becomes aware'' add ''or should have become aware''

— after ''contain the'' add ''the facility's''

(KKKKKK) 40 CFR 264.1090(c)

— delete ''excepted'' and replace with ''except''

— delete ''The report shall describe each occurrence during the previous 6-month period when a control device is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in § 264.1035(c)(4) or when a flare is operated with visible emissions as defined in § 264.1033(d).''

— after ''The written report shall include the'' add ''the facility's''

(3) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsections (b) to (e), inclusive, of this section shall apply.

(b) **Cost Estimates for Closure**

The owner or operator of a facility shall submit to the Commissioner the original cost-estimates for closure and post-closure care and all subsequent adjustments to the cost-estimates within thirty days of their completion in accordance with 40 CFR 264.142 and 40 CFR 264.144.

(c) **Tank Systems**

As soon as waste begins to accumulate in a tank or tank system, the owner or operator shall clearly label the tank or the tank system, whichever would be more conspicuous, with ''Hazardous Waste'' and other words which clearly identify the contents of the tank or tank system, such as ''flammable'', ''acid'', ''alkaline'', ''cyanide'', ''reactive'', ''explosive'', ''halogenated solvent'' or the chemical name. If it is not possible to label the tank or tank system so that the label is conspicuous, then the area adjacent to the tank or tank system shall be labeled as prescribed in this subsection so that the identification of the contents of the tank is clearly visible for inspection.

(d) **Underground Injection**

Treatment, storage, or disposal of hazardous waste by underground injection is prohibited.

(e) **Management of Containers**

The owner or operator of a hazardous waste facility using containers to store hazardous waste, shall ensure that each container storing hazardous waste is labeled or marked clearly with the words ''Hazardous Waste'' and other words that identify the contents of the container such as ''flammable'', ''acid'', ''alkaline'', ''cyanide'', ''reactive'', ''explosive'', ''halogenated solvent'' or the chemical name.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002, September 10, 2002)

Sec. 22a-449(c)-105. Interim status standards for owners and operators of hazardous waste treatment, storage, and disposal facilities

(a) **Incorporation by Reference**

(1) 40 CFR 265 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 265.1(c)(4) (which relates to the requirements of 40 CFR 265),

(B) 40 CFR 265.1(c)(15)

(which relates to a facility in New York),

(C) 40 CFR 265.1(f) (which relates to storage of waste military munitions),

(D) 40 CFR 265.90(e) (which provides for a waiver for surface impoundments under specified conditions),

(E) 40 CFR 265.90(f) (which relates 40 CFR 265, subpart F alternatives),

(F) 40 CFR 265.110(c) (which relates to the applicability of 40 CFR 265.121),

(G) 40 CFR 265.110(d) (which relates to alternative closure requirements),

(H) 40 CFR 265.112(b)(8) (which relates to certain closure plan requirements),

(I) 40 CFR 265.112(c)(1)(iv) (which relates to certain closure plan changes),

(J) 40 CFR 265.118(c)(4)&(5) (which relates to certain post-closure plan changes),

(K) 40 CFR 265.118(d)(1)(iii) (which relates to certain post-closure plan amendments),

(L) 40 CFR 265.121 (which relates to certain post-closure requirements),

(M) 40 CFR 265.140(d) (which relates to alternative financial requirements),

(N) 40 CFR 265.149 (which relates to state-required financial mechanisms),

(O) 40 CFR 265.201(b)(3) (which allows small quantity generators to operate uncovered tanks with 60 centimeters of freeboard),

(P) 40 CFR 265.201(e)(1)(iii) (which allows small quantity generators to store ignitable and/or reactive waste in a tank used solely for emergencies),

(Q) 40 CFR 265.314(c)(1)&(3) (which relates to placing free liquids in landfills),

(R) 40 CFR 265.314(f) (which relates to sorbents used to treat free liquids),

(S) 40 CFR 265.340(b) (which relates to integration of MACT standards),

(T) 40 CFR 265, Subpart R (which relates to underground injection),

(U) 40 CFR 265.1080(e), (f) and (g) (which relate to a facility in West Virginia),

(V) 40 CFR 265.1082(a) (which relates to an expired implementation schedule),

(W) 40 CFR 265, subpart EE (which relates to storage of hazardous waste munitions and explosives).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 265.1(b)

— delete ''40 CFR 264.552, 264.553, and 264.554'' and replace with ''40 CFR 264.552 and 264.553''

(B) 40 CFR 265.1(c)(14) introductory paragraph

— after each occurrence of ''handling'' add ''or transporting''

— in the second sentence, after ''handlers'' add ''and transporters''

— after ''273'' add ''and section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(C) 40 CFR 265.1(c)(14)(iii)

— delete ''and''

(D) 40 CFR 265.1(c)(14)(iv)

— delete the period and replace with ''; and''

— add a new paragraph (v) as follows: ''(v) used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies.''

(E) 40 CFR 265.11

— delete ''(45 FR 12746)''

(F) 40 CFR 265.13(c)(3)

— delete ''a biodegradable sorbent to the waste in the container'' and replace with ''a non-biodegradable sorbent in accordance with 40 CFR 265.316(b)''

(G) 40 CFR 265.15(b)(4)

— after ''when in use'' add ''and emergency equipment designated in the contingency plan shall be inspected at least once each calendar month to ensure that such equipment is in the proper location and available for use as specified in the contingency plan. The owner or operator of a facility not required to have a contingency plan shall develop a specific list of emergency equipment, including its locations and availability for use, to be included in the schedule for inspection and such equipment shall be inspected at least once each calendar month. Satellite accumulation areas are not subject to the monthly requirement stated herein.''

(H) 40 CFR 265.70

— delete '', and to owners and operators of off-site facilities with respect to waste military munitions exempted from manifest requirements under 40 CFR 266.203(a)''

(I) 40 CFR 265.71(a)(4)

— after ''generator'' add '', generator state and consignment state''

(J) 40 CFR 265.71(b)(4)

— after each ''generator'' add '', generator state and consignment state''

(K) 40 CFR 265.73(b)(13)

— delete the last ''and''

(L) 40 CFR 265.73(b)(14)

— delete the period and replace with ''; and''

— add a new paragraph (15) as follows: ''(15) Any other information required by section 22a-449(c)-105 of the Regulations of Connecticut State Agencies to be maintained in the operating record.''

(M) 40 CFR 265.75

— after paragraph (j), add a new paragraph (k) as follows: ''(k) Any other information which the commissioner specifies relating to the facility's activities. The commissioner shall specify such information in writing prior to submission of the report.''

(N) 40 CFR 265.90(c)

— after ''subpart'' add ''or section 22a-449(c)-105(c) of the Regulations of Connecticut State Agencies''

— add a new paragraph (3) as follows: ''(3) The commissioner may impose conditions he deems necessary to protect human health and the environment regarding any groundwater monitoring waiver issued pursuant to 40 CFR 265.90(c). The commissioner may rescind the waiver of any monitoring requirements based upon indications of a release, the concentration of identified contaminants, a review of site history or facility operation and management practices, the facility's proximity to groundwater wells, the water quality classification and goal for the facility and surrounding area under section 22a-426 of the Connecticut General Statutes, changed circumstances, or non-compliance with any conditions imposed concerning the granting of a waiver or similar considerations.''

(O) 40 CFR 265.143(g)

— delete ''If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrator of all such Regions.'' and replace with ''If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance submitted for such facilities to any other EPA regional office or state agency regulating hazardous waste shall be submitted to the commissioner.''

(P) 40 CFR 265.145(e)(11)

— delete ''direct of higher tier'' and replace with ''direct or higher tier''

— delete ''(f)(1)'' and replace with ''(e)(1)''

— delete ''(f)(3)'' and replace with ''(e)(3)''

(Q) 40 CFR 265.145(g)

— delete ''If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrator of all such Regions.'' and replace with ''If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance submitted for such facilities to any other EPA regional office or state agency regulating hazardous waste shall be submitted to the commissioner.''

(R) 40 CFR 265.147(b)(1)

— add new paragraphs (i) and (ii) as follows: ''(i) Each insurance policy shall be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in 40 CFR 264.151(i). The wording of the Certificate of Insurance shall be identical to the wording specified in 40 CFR 264.151(j). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of insurance to the commissioner. If requested by the commissioner, the owner or operator shall provide a signed duplicate original of the insurance policy. (ii) Each insurance policy shall be issued by an insurer which

is licensed by the Connecticut Department of Insurance to transact the business of insurance in the state of Connecticut.''

(S) 40 CFR 265.192(d)

— after ''performed'' add ''and the tank system shall successfully pass a test for tightness''

(T) 40 CFR 265.193(c)

— in the Note, after each ''as amended'' add ''and chapter 446k of the Connecticut General Statutes''

(U) 40 CFR 265.196(b)(1)

— after ''demonstrates'' add ''to the Commissioner and the Commissioner agrees''

— at the end of the paragraph add ''The owner or operator shall make all reasonable efforts to mitigate the effect of the release.''

(V) 40 CFR 265.196(d)(1)

— delete ''Regional Administrator within 24 hours of'' and replace with ''commissioner immediately upon''

— delete ''If the release has been reported pursuant to 40 CFR 302, that report will satisfy this requirement'' and replace with ''Any release that has been reported to the National Response Center pursuant to 40 CFR 302, shall still be reported separately to the commissioner using the 24-hour Emergency Spill Response telephone number at (860) 424-3338 or, if that number is unavailable, at (860) 424-3333. In addition to this oral notification, the owner or operator shall comply with all other applicable reporting or notification requirements regarding the release, including but not limited to, the reporting required by section 22a-450 of the Connecticut General Statutes.''

(W) 40 CFR 265.201(a)

— delete ''6000'' and replace with ''1000''

(X) 40 CFR 265.221(g)

— after ''obtains'' add ''the commissioner's prior written approval of a''

— after ''overtopping,'' in the last sentence add ''and the commissioner's written approval''

(Y) 40 CFR 265.222(a)

— after ''leakage rate to the Regional Administrator'' add ''for the commissioner's review and approval''

— delete ''Within 60 days of receipt of the notification, the'' and replace with ''The''

— delete ''; or extend the review period for up to 30 days. If no action is taken by the Regional Administrator before the original 60 or extended 90 day review periods, the action leakage rate will be approved as proposed by the owner or operator''

(Z) 40 CFR 265.222(b)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

(AA) 40 CFR 265.223 Containment system.

— delete ''§ 265.223 Containment system. All earthen dikes must have a protective cover, such as grass, shale, or rock, to minimize wind and water erosion and to preserve their structural integrity.''

— delete the editorial note in its entirety

(BB) 40 CFR 265.224

— delete ''Reserved'' and replace with ''The owner or operator shall ensure that all earthen dikes used with a surface impoundment has a protective cover, such as

grass, shale, or rock, to minimize wind and water erosion and preserve the structural integrity of any such dike.''

(CC) 40 CFR 265.228(b)(2)

— delete ''§§ 265.221(c)(2)(iv) and (3)'' and replace with ''40 CFR 264.221(c)(2)(iv) and (3)''

(DD) 40 CFR 265.229(b)(2)

— delete paragraph (b)(2) in its entirety

(EE) 40 CFR 265.229(b)(3)

— after ''obtains'' add ''the commissioner 's prior written approval of ''

(FF) 40 CFR 265.229(b)(4)

— after ''it'' add ''and the commissioner's written approval of said certification''

(GG) 40 CFR 265.255(a)

— after ''leakage rate to the Regional Administrator'' add ''for the commissioner's review and approval''

— delete ''Within 60 days of receipt of the notification, the'' and replace with ''The''

— delete ''; or extend the review period for up to 30 days. If no action is taken by the Regional Administrator before the original 60 or extended 90 day review periods, the action leakage rate will be approved as proposed by the owner or operator''

(HH) 40 CFR 265.255(b)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

— delete ''surface impoundment'' and replace with ''waste pile''

(II) 40 CFR 265.272(a)

— delete paragraph (a) and replace with the following: ''Before applying any hazardous waste to a treatment zone, the owner or operator shall submit to the commissioner for review and approval, a demonstration that hazardous constituents in the waste can be completely degraded or transformed in the treatment zone. The owner or operator shall not apply any hazardous waste to a treatment zone unless and until the owner or operator receives the written approval of the commissioner.''

(JJ) 40 CFR 265.301(a)

— delete '' § 264.301(d), (e), or (f), of this chapter'' an replace with ''40 CFR 264.301(c), unless exempted under 40 CFR 264.301(d), (e) or (f)''

(KK) 40 CFR 265.302(a)

— after ''leakage rate to the Regional Administrator'' add ''for the commissioner's review and approval''

— delete ''Within 60 days of receipt of the notification, the'' and replace with ''The''

— delete ''; or extend the review period for up to 30 days. If no action is taken by the Regional Administrator before the original 60 or extended 90 day review periods, the action leakage rate will be approved as proposed by the owner or operator''

(LL) 40 CFR 265.302(b)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

— delete ''surface impoundment'' and replace with ''landfill''

(MM) 40 CFR 265.316(b)

— after ''a sufficient quantity of'' add ''nonbiodegradable''

— delete '', determined to be nonbiodegradable in accordance with § 265.314(f),''

— at the end of the paragraph add ''For purposes of this paragraph, nonbiodegradable sorbents are (i) inorganic minerals, other inorganic materials, and elemental

carbon (e.g., aluminosilicates, clays, smectites, fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon); or (ii) high molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (hdpe), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene and tertiary butyl copolymers); or (iii) mixtures of these nonbiodegradable materials. A sorbent is also nonbiodegradable if it is determined to be nonbiodegradable under any of the following tests: (i) ASTM method G21-70 (1984a)-standard practice for determining resistance of synthetic polymer materials to fungi; or (ii) ASTM method G22-76 (1984b)-standard practice for determining resistance of plastics to bacteria; or (iii) OECD test 301B: (CO_2 evolution modified strum test). Nonbiodegradable sorbents do not include polymers derived from biological material or polymers specifically designed to be degradable.''

(NN) 40 CFR 265.340(c)

— in the introductory paragraph, delete ''are'' and replace with ''may request of the commissioner that they be''

— after 40 CFR 265.340(c)(4) add the following: ''in making a request under 40 CFR 265.340(c), an owner or operator shall provide, for the commissioner's review and approval, all documentation that the commissioner deems necessary to evaluate the owner or operator's request. An owner or operator shall comply with all of the requirements of this subpart unless and until the commissioner specifies otherwise in writing.''

(OO) 40 CFR 265.375(c)

— after ''lead'' add '', cadmium,''

(PP) 40 CFR 265.440(a)

— delete paragraph (a) and replace it with the following: ''(a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, or surface water run-off to an associated collection system.

(1) For drip pads used for the management of wastes specified in 40 CFR 261.31 as F032:

(i) existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990; and

(ii) the requirement at 40 CFR 265.443(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992, except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

(2) For drip pads used for management of hazardous wastes other than hazardous waste specified in 40 CFR 261.31 as F032:

(i) existing drips pads are those constructed before October 31, 2001 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to October 31, 2001. All other drip pads are new drip pads; and

(ii) the requirement at 40 CFR 265.443(b)(3) to install a leak collection system applies only to those drip pads that are constructed after October 31, 2001, except

for those drip pads constructed October 31, 2001 for which the owner or operator has a design and has entered into binding financial or other agreement for construction prior to October 31, 2001.''

(QQ) 40 CFR 265.440(c)(1)(iv)

— delete ''Federal'' and replace with ''state of Connecticut''

(RR) 40 CFR 265.443(a)(4)(i)

delete ''§ 265.442(a) instead of § 265.442(b)'' and replace with ''40 CFR 265.442(b) instead of 40 CFR 265.442(a)''

(SS) 40 CFR 265.443(b)

— delete ''§ 265.442(b) instead of § 265.442(a)'' and replace with ''40 CFR 265.442(a) instead of 40 CFR 265.442(b)''

(TT) 40 CFR 265.1033(k) introductory paragraph

— delete ''by implementing the following requirements''

(UU) 40 CFR 265.1033(k)(1)

— delete ''in accordance with the following requirements'' and replace with ''to ensure proper operation and maintenance of such system. At a minimum, such monitoring and inspection shall include compliance with the following requirements''

(VV) 40 CFR 265.1033(k)(1)(ii)(A)

— in the second sentence delete ''following any'' and replace with ''each''

(WW) 40 CFR 265.1033(k)(2)

— delete ''in accordance with the following requirements'' and replace with ''to ensure proper operation and maintenance of such system. At a minimum, such monitoring and inspection shall include compliance with the following requirements''

(XX) 40 CFR 265.1034(f)

— after ''knowledge of the waste,'' add ''the owner or operator shall, within thirty days, or another time period approved by the commissioner in writing, implement''

— delete ''may be used'' and replace with ''or another approach that the commissioner approves in writing''

(YY) 40 CFR 265.1063(f)

— after ''weight,'' add ''the owner or operator shall comply with''

— delete ''can be used'' and replace with ''or another approach that the commissioner approves in writing''

(ZZ) 40 CFR 265.1080(b)(3)

— after ''plan'' add '', provided the owner or operator has complied with or remains in compliance with the closure plan approved by the commissioner''

(AAA) 40 CFR 265.1080(b)(4)

— after ''plan'' add '', provided the owner or operator has complied with or remains in compliance with the closure plan approved by the commissioner''

(BBB) 40 CFR 265.1080(b)(7)

— delete ''in accordance with'' and replace with ''in compliance with''

(CCC) 40 CFR 265.1080(c) introductory paragraph

— delete the paragraph in its entirety and replace with the following: ''(c) The owner or operator of a facility issued a permit by the commissioner pursuant to section 22a-449(c)-110 of the Regulations of Connecticut State Agencies, prior to December 6, 1996, shall comply with the requirements of 40 CFR 265, subpart CC, even if the permit does not require such compliance, unless the permit requires compliance with 40 CFR 264, subpart CC, in which event the requirements of 40

CFR 264, subpart CC shall apply. The requirements of 40 CFR 264, subpart CC shall apply if and when any permit described in this section is renewed.''

(DDD) 40 CFR 265.1080(d) introductory paragraph

— delete ''are administratively stayed for'' and replace with ''shall not apply to''

— delete ''when'' and replace with ''provided''

— delete ''meets'' and replace with ''has complied and remains in compliance with''

(EEE) 40 CFR 265.1080(d)(1)

— after ''identifies'' add '', in writing as part of documentation prepared and maintained pursuant to 40 CFR 265.1090(i),''

(FFF) 40 CFR 265.1080(d)(3)

— after ''the facility owner or operator'' add ''and shall note that documentation prepared in compliance with 40 CFR 265.1080(d)(2) and 265.1090(i) shall be made available if requested by the commissioner''

(GGG) 40 CFR 265.1081

— add the following definition in alphabetical order: ''m^3'' means cubic meter.

— add the following definition in alphabetical order: ''kPa'' means kilopascal.

— in the definition of ''Point of waste origination'', add a new paragraph (3) as follows: ''(3) For a generator, the point of waste origination means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste as defined in 40 CFR 261.''

(HHH) 40 CFR 265.1082(b)(2)(i)

— delete ''30'' and replace with ''12''

(III) 40 CFR 265.1082(c)

— delete ''30-month'' and replace with ''12-month''

(JJJ) 40 CFR 265.1082

— add a new paragraph (e) as follows: ''(e) For purposes of 40 CFR 265.1082, references to the term ''the amendment'' mean a statutory or regulatory amendment that renders the owner or operator of a facility subject to 40 CFR 265, subpart I, J, or K.''

(KKK) 40 CFR 265.1083(b)

— delete ''each hazardous waste management unit'' and replace with ''each tank, surface impoundment, and container''

(LLL) 40 CFR 265.1083(c)(2)

— after ''has been reduced'' add ''or destroyed''

(MMM) 40 CFR 265.1083(c)(2)(vii)

— delete ''has either''

(NNN) 40 CFR 265.1083(c)(2)(vii)(A)

— delete ''been issued a final permit'' and replace with ''has a currently valid and effective permit issued by the commissioner''

(OOO) 40 CFR 265.1083(c)(2)(viii)

— delete ''has either''

(PPP) 40 CFR 265.1083(c)(2)(viii)(A)

— delete ''been issued a final permit'' and replace with ''has a currently valid and effective permit issued by the commissioner''

(QQQ) 40 CFR 265.1083(c)(5)(i)

— after ''Waste Operations'' add ''and all applicable state air pollution control requirements''

(RRR) 40 CFR 265.1083(c)(5)(iii)

— after ''appendix B'' add ''and all applicable state air pollution control requirements''

— after the second occurrence of ''Total Enclosure'''' add ''in 40 CFR 52.741, appendix B''

(SSS) 40 CFR 265.1083(d)(2)(ii)

— after ''appropriate method'' add ''and the owner or operator shall perform a waste determination using the method specified by the commissioner.''

(TTT) 40 CFR 265.1084(a)(1)(i)

— delete ''An initial'' and replace with ''An owner or operator shall perform and initial''

— delete each occurrence of ''shall be made''

— after ''thereafter'' add ''an owner or operator shall perform''

(UUU) 40 CFR 265.1084(a)(1)(ii)

— delete ''Perform'' and replace with ''An owner or operator shall perform''

(VVV) 40 CFR 265.1084(b)(1)(i)

— delete ''An initial'' and replace with ''An owner or operator shall perform an initial''

— delete ''shall be made''

— after ''thereafter'' add ''an owner or operator shall''

(WWW) 40 CFR 265.1084(b)(1)(ii)

— delete ''Perform'' and replace with ''An owner or operator shall perform''

(XXX) 40 CFR 265.1085(c)

— delete ''meet'' and replace with ''comply with''

(YYY) 40 CFR 265.1085(c)(1)

— delete ''a hazardous waste'' and replace with ''each hazardous waste''

(ZZZ) 40 CFR 265.1085(c)(2)

— delete ''designed to meet'' and replace with ''that meets''

(AAAA) 40 CFR 265.1085(c)(2)(i)

— delete ''be designed to''

(BBBB) 40 CFR 265.1085(c)(2)(ii)

— after ''installed'' add ''and maintained''

(CCCC) 40 CFR 265.1085(e)

— delete ''meet'' and replace with ''comply with''

(DDDD) 40 CFR 265.1085(f)

— delete ''meet'' and replace with ''comply with''

(EEEE) 40 CFR 265.1085(f)(1)

— delete ''design the external floating roof in accordance with'' and replace with ''ensure that an external floating roof meets''

(FFFF) 40 CFR 265.1085(f)(1)(i)

— delete ''be designed to''

(GGGG) 40 CFR 265.1085(f)(1)(ii)(A)

— delete ''the metallic shoe seal shall be designed so that one end extends'' and replace with ''one end of the metallic shoe seal shall extend''

— delete ''other end extends'' and replace with ''other end shall extend''

(HHHH) 40 CFR 265.1085(g)

— delete ''meet'' and replace with ''comply with''

(IIII) 40 CFR 265.1085(g)(3)(iii)

— delete ''perform the inspections'' and replace with ''inspect the air emission control equipment''

(JJJJ) 40 CFR 265.1085(h)

— delete ‘‘meet’’ and replace with ‘‘comply with’’
(KKKK) 40 CFR 265.1085(h)(1)
— delete ‘‘be designed not to’’ and replace with ‘‘not’’
(LLLL) 40 CFR 265.1085(h)(3)
— delete ‘‘or the following conditions as’’ and replace with ‘‘condition’’
(MMMM) 40 CFR 265.1085(i)
— delete ‘‘meet’’ and replace with ‘‘comply with’’
(NNNN) 40 CFR 265.1085(i)(1)
— after ‘‘appendix B’’ add ‘‘and all applicable state air pollution control requirements’’
— after the second reference to ‘‘Total Enclosure’’ add ‘‘under 40 CFR 52.741, Appendix B’’
(OOOO) 40 CFR 265.1085(l) introductory paragraph
— delete ‘‘subpart’’ and replace with ‘‘40 CFR 265.1085’’
(PPPP) 40 CFR 265.1085(l)(1)(ii)
— delete ‘‘the procedures specified in the applicable section of this subpart’’ and replace with ‘‘the applicable procedures in 40 CFR 265.1085’’
— at the end of the paragraph add the following: ‘‘This written plan and schedule and the results of all inspections shall be maintained in the facility operating record.’’
(QQQQ) 40 CFR 265.1086(b)
— delete ‘‘the surface impoundment’’ and replace with ‘‘each surface impoundment subject to this sections’’
— after ‘‘installing’’ add ‘‘, maintaining’’
(RRRR) 40 CFR 265.1086(c)
— delete ‘‘meet’’ and replace with ‘‘comply with’’
(SSSS) 40 CFR 265.1086(c)(1)
— delete ‘‘designed to meet the following specifications’’ and replace with ‘‘that complies with the following requirements’’
(TTTT) 40 CFR 265.1086(c)(1)(i)
— delete ‘‘be designed to’’
(UUUU) 40 CFR 265.1086(c)(3)(ii)
— delete ‘‘perform the inspections’’ and replace with ‘‘inspect the floating membrane cover and its closure devices’’
(VVVV) 40 CFR 265.1086(d)
— delete ‘‘meet’’ and replace with ‘‘comply with’’
(WWWW) 40 CFR 265.1086(d)(1)(i)
— delete ‘‘be designed to’’
(XXXX) 40 CFR 265.1086(d)(1)(ii)
— delete each occurrence of ‘‘be designed to’’
(YYYY) 40 CFR 265.1086(d)(3)(iii)
— delete ‘‘perform the inspections’’ and replace with ‘‘inspect the air emission control equipment’’
(ZZZZ) 40 CFR 265.1086(g)
— delete ‘‘subpart’’ and replace with ‘‘40 CFR 265.1086’’
(AAAAA) 40 CFR 265.1086(g)(2)
— delete ‘‘the procedures specified in the applicable section of this subpart’’ and replace with ‘‘the applicable procedures in 40 CFR 265.1086’’
— at the end of the paragraph add the following: ‘‘This written plan and schedule and the results of all inspections shall be maintained in the facility operating record.’’
(BBBBB) 40 CFR 265.1087(c)(4)(iii)

— after ''removed from the container and'' add ''placed in a container that complies with the requirements of 40 CFR 265.1087.''

— delete the third occurrence of ''the container'' and replace with ''The defective container''

(CCCCC) 40 CFR 265.1087(d)(4)(iii)

— after ''removed from the container'' add '', placed in a container that complies with the requirements of 40 CFR 265.1087''

(DDDDD) 40 CFR 265.1087(e)(2)

— delete ''meet'' and replace with ''comply with''

(EEEEE) 40 CFR 265.1087(e)(2)(i)

— after ''appendix B'' add ''and any applicable state air pollution control requirements''

— after the second occurrence of ''Total Enclosure'''' add ''under 40 CFR 52.741, appendix B''

(FFFFF) 40 CFR 265.1087(e)(4)

— delete ''subpart'' and replace with ''40 CFR 265.1087''

(GGGGG) 40 CFR 265.1087(g)(1)

— delete ''Each potential'' and replace with ''For purposes of determining whether a container operates with no detectable emissions, the owner or operator shall check each potential''

— delete '', shall be checked''

(HHHHH) 40 CFR 265.1087(g)(2)

— delete ''The test shall be performed'' and replace with ''In determining whether a container operates with no detectable emissions, the owner or operator shall perform the test''

(IIIII) 40 CFR 265.1087(h)

— delete ''Procedure for determining a container to be'' and replace with ''In determining whether a container is''

— after ''section'' add '', the following shall apply''

(JJJJJ) 40 CFR 265.1088(b)

— delete ''meet'' and replace with ''comply with''

(KKKKK) 40 CFR 265.1088(b)(1)

— delete ''meets'' and replace with ''complies with''

(LLLLL) 40 CFR 265.1088(c)

— at the beginning of the paragraph add the following: ''Except as is provided for in 40 CFR 265.1088(c)(2), a control device shall comply with the applicable specifications and requirements in 40 CFR 265.1088(c)(1)(i) to (iii), inclusive, at all times when gases, vapors or fumes are vented from the waste management unit through the closed vent system to the control device.''

— delete ''meet'' and replace with ''comply with''

(MMMMM) 40 CFR 265.1088(c)(2)(vi)

— delete ''operate the closed-vent system such that'' and replace with ''not allow''

— delete ''are not actively vented'' and replace with ''to be vented''

(NNNNN) 40 CFR 265.1088(c)(3)(ii)

— at the beginning of the paragraph add the following: ''The owner or operator shall determine whether carbon removed from a control device is a hazardous waste in accordance with 40 CFR 262.11.''

(OOOOO) 40 CFR 265.1088(c)(6)

— after ''design analysis'' add ''as specified in 40 CFR 265.1088(c)(5)(iv), then such design analysis cannot be used to demonstrate compliance with the requirements

of this section and within sixty (60) days of being notified of such disagreement, the owner or operator shall perform a performance test as specified in 40 CFR 265.1088(c)(5)(iii). The''

— delete ''then the disagreement shall be resolved the''

— after ''section'' add ''shall be used to determine compliance with 40 CFR 265.1088''

(PPPPP) 40 CFR 265.1089(b)

— after ''40 CFR 265.15'' add '', including recording inspections in accordance with 40 CFR 265.15(d)''

(QQQQQ) 40 CFR 265.1090(a)

— delete ''a minimum of three years'' and replace with ''the facility until closure of the facility''

— in the third sentence delete ''operating record until the'' and replace with ''operating record for a minimum of three years after any''

(RRRRR) 40 CFR 265.1090(b)(1)(ii)(A)

— after ''conducted'' add '', the name of the inspector and a notation of any observations made during the inspection''

(SSSSS) 40 CFR 265.1090(b)(2)(i)

— after ''collected,'' add ''the name of the person taking the samples, a description of the sampling methodology,''

(TTTTT) 40 CFR 265.1090(b)(2)(iii)(B)

— after ''performed,'' add ''the name of the person taking the measurements, a description of the device(s) used to take the measurements''

(UUUUU) 40 CFR 265.1090(c)(3)(i)

— after ''conducted'' add ''the name of the inspector and a notation of any observations made during the inspection''

(VVVVV) 40 CFR 265.1090(i) introductory paragraph

— after ''shall be provided'' add ''in the facility operating record''

(WWWWW) 40 CFR 265.1091

— delete ''[Reserved]'' and replace with ''(a) Each owner or operator managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of 40 CFR 265.1083(c) shall report to the commissioner each occurrence when hazardous waste is placed in the waste management unit in noncompliance with the conditions specified in 40 CFR 265.1083(c)(1) or (2), as applicable. Examples of such occurrences include placing in the waste management unit a hazardous waste having an average VO concentration equal to or greater than 500 ppmw at the point of waste origination; or placing in the waste management unit a treated hazardous waste of which the organic content has been reduced by an organic destruction or removal process that fails to achieve the applicable conditions specified in 40 CFR 265.1083(c)(2)(i) to (vi), inclusive. The owner or operator shall submit a written report to the commissioner within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

(b) Each owner or operator using air emission controls on a tank in accordance with the requirements 40 CFR 265.1085(c) shall report to the commissioner each occurrence when hazardous waste is managed in the tank in noncompliance with

the conditions specified in 40 CFR 265.1085(b). The owner or operator shall submit a written report to the commissioner within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

(c) Each owner or operator using a control device in accordance with the requirements of 40 CFR 265.1088 shall submit a semiannual written report to the commissioner, except as provided for in 40 CFR 265.1091(d). The report shall describe each occurrence during the previous 6-month period when either: (1) a control device is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in 40 CFR 265.1035(c)(4); or (2) a flare is operated with visible emissions for five minutes or longer in a two-hour period, as defined in 40 CFR 265.1033(d). The written report shall include the EPA identification number, facility name and address, and an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

(d) A report to the commissioner in accordance with the requirements of 40 CFR 265.1091(c) is not required for a 6-month period during which all control devices subject to 40 CFR 265, subpart CC are operated by the owner or operator such that: (1) During no period of 24 hours or longer did a control device operate continuously in noncompliance with the applicable operating values defined in 40 CFR 265.1035(c)(4); and (2) No flare operated with visible emissions for longer than five minutes during a two-hour period, as defined in 40 CFR 265.1033(d).''

(XXXXX) 40 CFR 265.1100(d)

— delete ''permit'' and replace with ''prevent''

(3) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsections (b) to (g), inclusive, of this section shall apply.

(b) **Facility Containment Standards**

In addition to the requirements of 40 CFR 265, Subpart I, the owner or operator of a facility shall comply with the containment system standards specified in 40 CFR 264.175.

(c) **Ground Water Monitoring**

(1) Applicability

(A) In addition to the provisions of 40 CFR 265.90(a), the commissioner may, when authorized by any applicable law, issue an order requiring the owner or operator of any facility which treats, stores, or disposes of hazardous waste to implement a ground water monitoring program. Any such order may impose requirements in addition to those specified in this subsection.

(B) An owner or operator required to implement a ground water monitoring program shall at all times during the active life of the facility, including closure, and during the post-closure care period conduct ground water monitoring in accordance with the requirements of 40 CFR 265.90 TO 265.94, inclusive, section 22a-449(c)-105(c) of the Regulations of Connecticut State Agencies, and the plan submitted pursuant to section 22a-449(c)-105(c) of the Regulations of Connecticut State

Agencies. In the case of any inconsistency between the regulations and the plan, the owner or operator shall comply with the more stringent requirement.

(2) Ground Water Monitoring Program

(A) On or before November 19, 1981, the owner or operator of a facility who is required, either by 40 CFR 265.90(a) or by order issued by the commissioner under any applicable law, to implement a ground water monitoring program shall submit to the commissioner a comprehensive written ground water monitoring plan. All amendments to a ground water monitoring plan shall be submitted to the commissioner in accordance with subparagraph (C) of this subdivision. The owner or operator shall keep a copy of the plan, as amended, at the facility at all times. The ground water monitoring plan and any amendments to the plan shall describe a monitoring program which meets the requirements of 40 CFR 265.91 and complies with 40 CFR 265.92 to 265.94, inclusive, this subsection, and any order of the commissioner. In addition to the requirements of 40 CFR 265.91 to 265.94, inclusive, such plan shall include, at a minimum, a narrative description of all aspects of the ground water monitoring program, including but not limited to the following:

(i) Site and source characterization, including, but not limited to: vicinity maps, to scale, with title, date, scale, north arrow and legend, showing site location and natural and artificial features in the area surrounding the site; site map, to scale, with title, date, scale, north arrow and legend, depicting site boundaries, natural and artificial features, surface waters, and all solid waste management units; descriptions of site activities and processes, current and historic, and hazardous materials used or generated; and current and historic sources of pollution on-site;

(ii) Geology and hydrogeology summary for the site and vicinity, including, but not limited to: geologic map(s) with title, date, scale, north arrow and legend, providing regional and site-specific detail; hydro-stratigraphic cross-section(s) with title, date, scale, north arrow and legend; identification of the uppermost aquifer below the site, its connection with other water-bearing strata, and its vertical and lateral boundaries; evaluation of vertical and lateral components of flow in the uppermost aquifer; hydraulic conductivity of the uppermost aquifer and its variability; pertinent physical and chemical properties of any confining stratum relative to wastes on-site; seasonal or other temporal changes which may affect site hydrogeologic interpretations; location of water supply wells and surface waters on-site and in the potentially affected area and discussion of how the site may impact water quality; and a summary and interpretation of all ground water monitoring data collected to date, if any;

(iii) A description of and justification for the ground water monitoring system, including, but not limited to: the number of monitoring wells and piezometers; a site map with title, date, scale, north arrow and legend, showing their locations; placement rationale for each well and piezometer (relative to ground water flow, geology, suspected sources of pollution, and ground water monitoring program objectives); depths and screened intervals (including rationale); boring logs (including aborted holes and unusual drilling conditions); as-built construction diagrams; and construction and development methodology and the rationale for their selection;

(iv) A list of monitoring parameters and sampling frequency, including those required by 40 CFR 265.92 (b), water level, and any additional parameters which could reasonably be expected to be present at the site (site-specific parameters) and which may impact ground water quality, and the rationale for their selection, based on an evaluation of the contaminant source, site history and characteristics, and related factors;

(v) A ground water sampling and analysis plan, including, but not limited to: procedures and techniques for sample collection, sample preservation and shipment; analytical procedures; chain of custody control; and field and laboratory quality assurance/quality control procedures;

(vi) Details of data evaluation and response procedures which meet the requirements of 40 CFR 265.93, and include, but are not limited to: monitoring program objectives and the rationale behind evaluation procedures; specific evaluation techniques, including details of any statistical or trend analyses proposed, showing how the program objectives are achieved; and reporting format; and

(vii) Other information as the Commissioner deems necessary in order to determine whether the monitoring program is adequate to determine the effect of the facility on the ground waters of the State.

(B) All monitoring which is required by law or specified in the ground water monitoring plan shall be conducted at least quarterly throughout the active life of the facility, including closure, and during the post-closure care period. Commencing with the second year following the installation of monitoring wells, and upon the completion of at least four quarterly sampling events, an owner or operator may conduct the monitoring required by law or specified in the ground water monitoring plan on a semi-annual basis provided that he has obtained the prior written approval of the commissioner. Such approval shall be based upon site-specific technical information submitted by the owner or operator which clearly demonstrates that more frequent monitoring is unnecessary in evaluating the impact of the site on any waters of the state. Any approval issued by the commissioner reducing the frequency of sampling may include conditions the commissioner deems necessary to protect human health and the environment. The commissioner may require the resumption of quarterly monitoring based upon indications of a release, the concentration of identified contaminants, a review of site history or facility operation and management practices, the facility's proximity to groundwater wells, the water quality classification and goal for the facility and surrounding area under section 22a-426 of the Connecticut General Statutes, changed circumstances, or non-compliance with any conditions imposed concerning the reduction in monitoring requirements or similiar considerations.

(C) Except as allowed by the Commissioner in writing or as required by law, including but not limited to 40 CFR 265.93 (d), the owner or operator shall submit any amendment to the ground water monitoring plan to the Commissioner no later than sixty days prior to implementation of the amendment. Any change in the ground water monitoring program which modifies a post-closure plan or the length of a post-closure care period shall be made in accordance with 40 CFR 265.118 and shall not be implemented until the Commissioner has made any determination required by 40 CFR 265.118. Notwithstanding the time deadlines specified in this subparagraph, the owner or operator shall comply with any more stringent time deadlines set forth in 40 CFR 265.93 (d).

(3) Reporting Requirements.

(A) In addition to any other reporting requirements imposed by law, including but not limited to 40 CFR 265.93(d), if requested in writing by the commissioner, the owner or operator of a facility shall submit a report or reports on ground water monitoring conducted or to be conducted at a facility. Such report(s) shall be submitted to the commissioner within the timeframe specified by the commissioner. However, if no timeframe is specified and the request concerns groundwater monitoring which has already been conducted, the requested report(s) shall be submitted

within thirty days of receipt of the commissioner's written request. If no timeframe is specified and the request concerns groundwater monitoring which has not yet been conducted, the requested report(s) shall be submitted within fifteen days of the owner or operator's receipt of groundwater monitoring sampling results or sixty days after the completion of groundwater monitoring, whichever is sooner. Unless otherwise specified by the commissioner in writing, in addition to the requirements of 40 CFR 265.94, such reports shall include, but not be limited to, the following:

(i) One table in which the following is shown for all wells and piezometers: the date of sampling, monitoring data, including replicate values if applicable, and ground water depths and elevations;

(ii) Identification, by well and parameter, of all data with values which exceed those in 40 CFR 265 Appendix III, any Maximum Contaminant Levels (MCLs) in 40 CFR 141, any potable water standard determined by the Connecticut Department of Health Services and any remediation standard established under section 22a-133k-1 to 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies;

(iii) A ground water flow contour map to scale with title, date, scale, north arrow and legend, based on the data from the sampling event including, at a minimum: well and piezometer location, ground water elevations, ground water elevation contours, flow direction, solid waste management units, structures and paved areas, property boundaries, and surface waters on-site and in the potentially affected area;

(iv) As-built construction drawings, boring logs, and supporting field notes for construction and development of any wells and piezometers installed since the last report;

(v) Scheduled date of next sampling event; and

(vi) Results of any site-specific data and statistical evaluation required or specified in the ground water monitoring plan.

(B) In addition to any other reporting requirements imposed by law, including but not limited to 40 CFR 265.93(d), the owner or operator of any facility required to implement a ground water monitoring program pursuant to the State Hazardous Waste Management Regulations shall summarize, on a calendar year basis in an annual report, the results of ground water monitoring at a facility. Such annual report shall be submitted to the commissioner by March first of the following calendar year. In addition to the requirements of 40 CFR 265.94, the annual report shall include, at a minimum, the following:

(i) One data table for each well, continuing the previous year's data, arranged with monitoring parameters, including ground water depth and elevation, on the vertical axis and sampling date on the horizontal axis;

(ii) One table in which the following is shown for all wells and piezometers: the date of sampling, monitoring data, including replicate values if applicable, and ground water depths and elevations;

(iii) Identification, by well and parameter, of all data with values which exceed those in 40 CFR 265 Appendix III, any Maximum Contaminant Levels (MCLs) in 40 CFR 141, any potable water standard determined by the Connecticut Department of Health Services and any remediation standard established under section 22a-133k-1 to 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies;

(iv) A ground water flow contour map for each sampling event conducted during the previous year to scale with title, date, scale, north arrow and legend, based on the data from the sampling event including, at a minimum: well and piezometer location, ground water elevations, ground water elevation contours, flow direction,

solid waste management units, structures and paved areas, property boundaries, and surface waters on-site and in the potentially affected area;

(v) Copies of all construction drawings, completion and development documentation, and boring logs for wells and piezometers installed during the previous year;

(vi) A separate graph for each monitored parameter, including ground water elevation. Each graph shall include data from the most recent three years and shall display the concentration on the vertical axis and the sampling date on the horizontal axis. The data points for each sampling location shall be connected by a straight line;

(vii) Discussion and interpretation of the ground water monitoring data and ground water flow directions. Such discussion shall include, but not be limited to: any site-specific data or statistical evaluations for the previous year, any variations in reported data throughout the history of monitoring at the site, and the results of determinations of concentration, extent, and rate of migration of monitored constituents in the ground water;

(viii) Evaluation of the adequacy of the monitoring system and program including but not limited to: discussion of results of the field and laboratory quality assurance and quality control program; review of the suitability of the specific wells and piezometers, parameters, and data evaluation methods for the program objectives; summary and evaluation of any modifications implemented in the ground water monitoring program in the previous two years; and evaluation of the condition of the wells and piezometers, specific actions that will be taken to correct any deficiencies and a schedule of implementation for such actions;

(ix) One summary table containing established baseline values and statistical values, which are used for data evaluation, and the data from which they were derived;

(x) One data table summarizing construction and completion details for all wells and piezometers used in the monitoring program, including, but not limited to, top of casing elevation, screen top elevation, screen length, total depth, typical ground water elevation, identification of the water bearing horizon, and the reason the well or piezometer is included in the monitoring program; and

(xi) Copies of laboratory analytical reports and field notes, for the previous year, from which the summary tables in the sampling event and annual reports were prepared.

(4) Notice of Deficiencies

(A) The commissioner may, at any time, review a ground water monitoring plan or report, submitted pursuant to this section and issue a notice of deficiency. Upon receipt of any such notice of deficiency the owner or operator shall immediately correct its ground water monitoring program and shall resubmit the plan or report, with the deficiencies corrected, within the time specified by the commissioner or, if no time is specified by the commissioner, within thirty days of the date that the notice of deficiency was mailed or personally delivered by the commissioner.

(B) The commissioner may issue a notice of deficiency under this subsection regardless of any previous approval. Failure of the commissioner to issue a notice of deficiency does not imply that the monitoring program, or any plan or report is approved or that it meets the requirements of 40 CFR 265.90 to 265.94, inclusive, or this section.

(C) The issuance of a notice of deficiency by the commissioner and the provision of any deadlines for correction of deficiencies shall not excuse non-compliance or delayed compliance with this section or prevent the commissioner from taking any other action authorized by law, including but not limited to action to ensure compliance or assess penalties.

(d) **Cost Estimates for Closure**

The owner or operator of a facility shall submit to the Commissioner the original cost-estimates for closure and post-closure care and all subsequent adjustments to the cost-estimates within thirty days of their completion in accordance with 40 CFR 265.142 and 40 CFR 265.144.

(e) **Tank Systems**

As soon as waste begins to accumulate in a tank or tank system, the owner or operator shall clearly label the tank or the tank system, whichever would be more conspicuous, with ''Hazardous Waste'' and other words which clearly identify the contents of the tank or tank system, such as ''flammable'', ''acid'', ''alkaline'', ''cyanide'', ''reactive'', ''explosive'', ''halogenated solvent'' or the chemical name. If it is not possible to label the tank or tank system so that the label is conspicuous, then the area adjacent to the tank or tank system shall be labeled as prescribed above so that the identification of the contents of the tank is clearly visible for inspection.

(f) **Underground Injection**

Treatment, storage, or disposal of hazardous waste by underground injection is prohibited.

(g) **Management of Containers**

The owner or operator of a hazardous waste facility using containers to store hazardous waste, shall ensure that each container storing hazardous waste is labeled or marked clearly with the words ''Hazardous Waste'' and other words that identify the contents of the container such as ''flammable'', ''acid'', ''alkaline'', ''cyanide'', ''reactive'', ''explosive'', ''halogenated solvent'' or the chemical name.

(h) **Corrective Action at Interim Status Disposal Facilities**

(1) For purposes of this subsection only, all terms shall be defined as defined in section 22a-449(c)-100 of the Regulations of Connecticut State Agencies, except that the following terms shall be defined as follows:

(A) ''Disposal facility'' means a facility that has not been issued a hazardous waste permit under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies, at which: (i) hazardous waste was disposed of in a surface impoundment, waste pile, land treatment unit, or landfill, after July 26, 1982; (ii) an owner or operator either certified closure of or applied for a closure by removal determination regarding the closure of a surface impoundment, waste pile, land treatment unit, or landfill, after January 26, 1983; (iii) hazardous waste was disposed of on the land or in the waters of the state, other than in a surface impoundment, waste pile, land treatment unit, or landfill, after July 26, 1982, except at a facility engaged solely in the storage or treatment of hazardous waste in containers or tanks; (iv) a tank system is required to meet the requirements for a landfill pursuant to 40 CFR 265.197; or (v) a containment building is required to meet the requirements for a landfill pursuant to 40 CFR 265.1102.

(B) ''Environmental condition assessment form'' or ''ECAF'' means a form, prescribed and provided by the commissioner, that contains all of the information about environmental conditions at the disposal facility, is prepared under the supervision of a licensed environmental professional, and is executed by the owner or operator of a disposal facility. ECAF includes the form defined in section 22a-134(17) of the Connecticut General Statutes.

(C) ''Hazardous substance'' or ''Hazardous substances'' means hazardous substances as defined on 42 U.S.C. § 9601 (section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980); any hazardous constituent identified in 40 CFR 261, Appendix VIII, or a petroleum product or by-

product for which there are remediation standards pursuant to section 22a-133k of the Connecticut General Statutes or for which such remediation standards have a process for calculating the numeric criteria of such substance.

(D) ''Licensed Environmental Professional'' means a person with a current valid and effective license issued by the commissioner pursuant to section 22a-133v of the Connecticut General Statutes.

(E) ''Release'' means any discharge, spillage, uncontrolled loss, seepage, filtration, leakage, injection, escape, dumping, pumping, pouring, emitting, emptying, spilling or disposal of a substance.

(F) ''Substance'' means an element, compound or material which, when added to air, water, soil or sediment, may alter the physical, chemical, biological or other characteristic of such air, water, soil or sediment.

(2) The requirements of this subsection shall apply only to the owner or operator of a disposal facility required to operate under, currently operating under, or authorized to operate under interim status pursuant to 40 CFR 270.70. The owner or operator of a disposal facility subject to this subsection shall investigate and remediate all releases of hazardous waste and hazardous substances at or from the facility in accordance with the requirements of this subsection.

(3) ECAF Submission.

(A) An owner or operator of a disposal facility subject to this subsection that has submitted an ECAF to the commissioner on or after October 1, 1995, pursuant to section 22a-134 to 22a-134e, inclusive, of the Connecticut General Statutes (commonly known as the ''Transfer Act''), need not submit another ECAF for any such facility, but may instead provide the commissioner with written notice of the date such ECAF was filed and shall include in any such notice an update to the information in the previously filed ECAF. Any update to the information in a previously filed ECAF shall be prepared under the supervision of a licensed environmental professional and executed by the owner or operator of the disposal facility. Any notice to the Commissioner submitted pursuant to this subparagraph shall be submitted on or before February 26, 2003.

(B) An owner or operator of a disposal facility subject to this subsection that has not previously submitted an ECAF to the commissioner shall submit an ECAF to the commissioner on or before August 27, 2003. An owner or operator of a disposal facility subject to this subsection that has submitted an ECAF to the commissioner pursuant to the Transfer Act before October 1, 1995, shall submit a new ECAF to the commissioner for such disposal facility on or before August 27, 2003.

(4) Upon review of the environmental condition assessment form and any other information about a disposal facility, the commissioner may notify the owner or operator of the facility, in writing, whether any further investigation and remediation of releases of hazardous waste or hazardous substances at or from such facility is required. In addition, the notification provided by the commissioner shall also indicate whether or not the review and approval of the investigation and remediation by the commissioner will be required or whether such investigation and remediation may be overseen by a licensed environmental professional. Before making any such determination, the commissioner may require the owner or operator of such facility to submit additional information, including but not limited to technical plans, technical reports, or other information related to any investigation or remediation undertaken at the facility.

(5) Investigation and Remediation – Licensed Environmental Professionals. The owner or operator of a disposal facility shall ensure that any investigation and

remediation of a facility overseen by an LEP complies with the following requirements:

(A) On or before thirty (30) days of receipt of the notice from the commissioner pursuant to subdivision (4) of this subsection (''the notice''), or such later date as may be approved in writing by the commissioner, the owner or operator of the facility shall submit to the commissioner a schedule for investigating and remediating releases of hazardous waste and hazardous substances at or from the facility. Such schedule shall, unless a later date is approved by the commissioner in writing, provide that investigation shall be completed within two years of the date of receipt of the notice from the commissioner and provide that remediation at the facility shall be initiated within three years of the date of receipt of the notice from the commissioner. The schedule shall also include a schedule for public participation prior to the initiation of remediation in accordance with subdivision (7) of this subsection. The owner or operator shall investigate and remediate the disposal facility in accordance with the proposed schedule and any modifications made thereto by the commissioner.

(B) The owner or operator of the disposal facility shall notify the commissioner in writing of any modifications to the schedule proposed under subparagraph (A) of this subdivision. The owner or operator shall obtain the written approval of the commissioner regarding any proposed modification if: (i) the proposed modification is to a schedule previously approved by the commissioner; or (ii) the modifications sought by the owner or operator would result in all investigation activities at the facility not being completed within two years of the date of receipt of the notice from the commissioner, or would result in not all remediation at the facility being initiated within three years of the date of the date of receipt of the notice from the commissioner. Any other modifications to the schedule do not need to be approved by the commissioner.

(C) The owner or operator of a disposal facility shall submit to the commissioner an independent verification by a licensed environmental professional that the disposal facility has been investigated in accordance with prevailing guidelines and standards and remediated in accordance with the remediation standard regulations, sections 22a-133k-1 through 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies.

(D) Notwithstanding any previous notification that an investigation or remediation may be overseen by an LEP, the commissioner may at any time, notify the owner or operator of a disposal facility that the commissioner's review and written approval of any investigation or remedial action at the facility is necessary. If the owner or operator of facility receives any such notice, then the provisions of subdivision (6) of this subsection shall thereafter apply to all investigation and remediation undertaken at the facility.

(6) Investigation and Remediation – The Department. The owner or operator of a disposal facility shall ensure that any investigation and remediation of a facility overseen by the Commissioner complies with the following requirements:

(A) On or before thirty (30) days of the receipt of notice from the commissioner pursuant to subdivision (4) of this subsection, or such later date as may be approved in writing by the commissioner, the owner or operator of the disposal facility shall submit for the commissioner's review and written approval, a proposed schedule for: (i) investigating and remediating the facility; and (ii) submitting to the commissioner scopes of work, technical plans, technical reports and progress reports related to such investigation and remediation. The schedule shall also include a schedule for

public participation prior to initiation of remediation in accordance with subdivision (7) of this subsection. Upon the commissioner's approval of such schedule, the owner or operator shall, in accordance with the approved schedule, submit scopes of work, technical plans, technical reports and progress reports to the commissioner for the commissioner's review and written approval. The commissioner may approve any such scopes of work, reports, plans or reports with modifications. The owner or operator shall perform all actions identified in the scopes of work, technical plans, technical reports and progress reports, as approved by the commissioner, in accordance with the schedule approved by the commissioner.

(B) The commissioner may approve, in writing, any modification to a previous approval regarding the investigation, remediation, or the schedule for performing any investigation or remediation undertaken pursuant to this subdivision.

(C) Notwithstanding any previous notification that the investigation or remediation of a disposal facility shall be overseen by the Commissioner, the commissioner may at any time, notify the owner or operator of a disposal facility in writing that the commissioner's review and written approval of the investigation or remediation at a disposal facility is no longer necessary. If the owner or operator of facility receives any such notice, then the provisions of subdivision (5) of this subsection shall thereafter apply to all investigation and remediation activities undertaken and all subsequent investigation and remediation at any such facility shall be overseen by a licensed environmental professional.

(7) Public Participation

(A) Prior to the commencement of any remedial action undertaken pursuant to this subsection, the owner or operator of a disposal facility shall provide public notice of the proposed remediation in accordance with the schedule submitted pursuant to this subsection or an alternative schedule approved by the commissioner. Any such notice shall summarize the investigations undertaken, the results of the investigations and clearly identify the proposed remediation activities. The notice shall also include an address, telephone number for an office and contact person from which any interested person may obtain additional information about the investigation undertaken and the proposed remediation, including but not limited to, access to all the scopes of work, plans, reports, sampling, analysis, and sampling results regarding the investigation undertaken at the facility and the consideration, if any, of alternative remedial actions. The notice shall also provide that comments of the proposed remediation may be submitted to the commissioner within forty-five days of the publication or mailing of such notice.

The owner or operator shall: (i) publish such notice in a newspaper having a substantial circulation in the municipality in which the disposal facility is located and the municipality or area affected by the facility; (ii) provide a copy of the notice to the director of health of the municipality where the disposal facility is located; (iii) provide a copy of the notice to all persons on the facility mailing list maintained pursuant to 40 CFR 124.10(c)(1)(ix); and (iv) either (I) erect and maintain for at least thirty days in a legible condition a sign not less than six feet by four feet at the facility, which sign shall be clearly visible from the public highway, and shall include the words ''ENVIRONMENTAL CLEAN-UP IN PROGRESS AT THIS SITE. FOR FURTHER INFORMATION CONTACT:'', including a telephone number for an office from which any interested person may obtain additional information about the remediation, or (II) mail a copy of the notice to each owner of record of property which abuts the facility, at the address for such property on the last-completed grand list of the municipality where the facility is located.

(B) The commissioner shall forward a copy of all comments received by the date specified in the public notice on the proposed remediation, and all comments made at a public hearing, to the owner or operator of the facility. The owner or operator shall, within sixty days of receiving such comments, submit to the commissioner a written summary of all such comments and a written response to each such comment. The commissioner shall review such summary and responses and shall adopt it as his own, adopt it with modifications, or reject it and prepare a summary of and response to each comment. The commissioner shall send a copy of the summary and responses to comments and his action with respect thereto to each person who submitted comments on the remediation proposal.

(C) If the commissioner determines that there is substantial public interest in any remediation proposed pursuant to this subsection, he may hold a public meeting on such proposed remediation, and he shall hold a meeting upon receipt of a petition signed by twenty-five or more persons. Notice of any such meeting shall be given in the manner prescribed by subparagraph (A) of this subdivision. Any such meeting need not be conducted pursuant to the provisions of chapter 54 of the Connecticut General Statutes.

(8) The investigation and remediation required under this subsection shall, at a minimum, be equivalent to that specified for corrective action in 40 CFR 264.101 and the commissioner shall, to the extent feasible, ensure that any such investigation and remediation is consistent with investigation and remediation undertaken under other state programs. Nothing in this subsection, however, shall relieve an owner or operator from any other obligation imposed by law, including but not limited to, any obligation imposed under the state's hazardous waste management regulations, including any closure or post-closure obligation; or any requirement imposed under sections 22a-133k-1 to 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies.

(9) Upon request by the commissioner, the owner or operator shall submit to the commissioner copies of technical plans, reports, analytic results of any other information related to investigation and remediation of a facility undertaken pursuant to this subsection. Unless the Commissioner specifies another period of time, the owner or operator shall submit the information requested by the Commissioner within thirty days of the Commissioner's request.

(10) Disposal Facilities Also Subject to Section 22a-134 to 22a-134e of the Connecticut General Statutes, inclusive.

(A) Investigation. Except as provided for in this subparagraph, an owner or operator who is performing or has completed an investigation of a disposal facility pursuant to sections 22a-134 to 22a-134e of the Connecticut General Statutes, inclusive, (commonly known as the ''Transfer Act'') shall be deemed to be satisfying or have satisfied the requirement to investigate such disposal facility as required by this subsection. The foregoing shall apply, however, only to that portion of a disposal facility at which an investigation is being performed or has been completed under the Transfer Act. If for any reason, including but not limited to, a review of the investigation undertaken at such disposal facility, or comments received pursuant to 40 CFR 270.73, the Commissioner determines that any such disposal facility, or any portion thereof, is not being investigated or has not been investigated in accordance with prevailing standards or guidelines or any other requirement of the Transfer Act or that the investigation undertaken is not sufficient to identify the nature and extent of all releases of hazardous waste and hazardous substances at or from such disposal facility, the owner or operator shall not be deemed to have satisfied the

requirements of this subsection and shall perform the investigation required by this subsection. The Commissioner will notify the owner or operator in writing, pursuant to subdivision (4) of this subsection, if he determines that further investigation of a disposal facility is required and shall include the basis for any such determination in any such notification.

(B) Remediation. Except as provided for in this subparagraph, an owner or operator who is completing or has completed remediation of a disposal facility pursuant to sections 22a-134 to 22a-134e of the Connecticut General Statutes, inclusive, (commonly known as the ''Transfer Act'') shall be deemed to be satisfying or have satisfied the requirement to remediate such disposal facility as required by this subsection. The foregoing shall apply, however, only to that portion of a disposal facility at which remediation is actually being performed or has been completed under the Transfer Act. If for any reason, including but not limited to, a review of the remediation undertaken at any such disposal facility, or comments received pursuant to 40 CFR 270.73, the Commissioner determines that that any such disposal facility, or any portion thereof, is not being remediated or has not been remediated in accordance with the remediation standards or any other requirement of the Transfer Act or that the remediation undertaken is not protective of human health or the environment, the owner or operator shall not be deemed to have satisfied the requirements of this subsection and shall perform the remediation required by this subsection. The Commissioner will notify the owner or operator in writing, pursuant to subdivision (4) of this subsection, if he determines that further remediation of a disposal facility is required and shall include the basis for any such determination in any such notification.

(C) Nothing in this subdivision shall exempt an owner or operator from the requirement to submit an ECAF under subdivision (3) of this subsection.

(11) Nothing is this subsection shall affect the authority of the Commissioner under any other statute or regulation, including, but not limited to, the authority to issue any order to prevent or abate pollution or potential sources of pollution.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002, September 10, 2002)

Sec. 22a-449(c)-106. Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities

(a) **Incorporation by Reference**

(1) 40 CFR 266 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 266.80 (which relates to spent-lead acid batteries);

(B) 40 CFR 266.100(b) (which relates to integration of MACT standards);

(C) 40 CFR 266.100(d)(3)(i)(D) (which relates to certain certification requirements);

(D) 40 CFR 266, subpart M (which relates to military munitions).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 266.100(a)

— delete ''paragraphs (b), (c), (d), and (f)'' and replace with ''paragraphs (c), (d), (e), (g) and (h)''

(B) 40 CFR 266.100(d) introductory paragraph

— delete ''conditionally''

— after ''266.112'' add '', provided any such owner or operator is in compliance with the requirements of this paragraph''

(C) 40 CFR 266.100(d)(1) introductory paragraph

— delete the paragraph in its entirety and replace with the following: ''(1) To be exempt from 40 CFR 266.102 to 266.111, inclusive, an owner or operator of: (a) A metal recovery furnace, other than a lead recovery or a nickel-chromium recovery furnace, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing or (b) A mercury recovery furnace, other than a mercury recovery furnace that an owner or operator claims is exempt under 40 CFR 266.100(d)(3), must comply with the following requirements:''

(D) 40 CFR 266.100(d)(1)(i)(B)

— delete ''paragraph (c)(2)'' and replace with ''paragraph (d)(2)''

(E) 40 CFR 266.100(d)(1)(ii)

— delete the paragraph in its entirety and replace with the following ''(ii) Submit for the commissioner's review and approval a waste analysis plan describing how the owner or operator will sample and analyze hazardous waste and other feedstocks to comply with, and maintain compliance with, the requirements of 40 CFR 266.100(d). Such plan shall include, but not be limited to the parameters to be tested, the rationale for the proposed parameters, how analysis of these parameters will provide sufficient information to comply with 40 CFR 266.100(d), the frequency of sampling and proposed test methods specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 40 CFR 260.11. The owner or operator may propose another test method if SW-846 does not prescribe a method for a particular determination. The owner or operator shall implement the waste analysis plan approved by the commissioner; and''

(F) 40 CFR 266.100(d)(1)(iii)

— after ''feedstocks'' add ''and all waste sampling and analysis results and all other records used to comply with 40 CFR 266.100(d)(1)(ii)''

(G) 40 CFR 266.100(d)(1)

— add a new paragraph (iv) as follows: '' (iv) The commissioner may decide on a case-by-case basis that an owner or operator is not processing hazardous waste solely for metal recovery, or that the processing of hazardous waste in a metal recovery furnace described in 40 CFR 266.100(d), exempt from the requirements of 40 CFR 266.102 to 266.111, inclusive, may pose a hazard to human health or the environment. In either situation, after adequate notice and opportunity for comment, the commissioner may determine that the owner or operator of the metal recovery furnace shall comply with the requirements of 40 CFR 266.102 to 266.111, inclusive.''

(H) 40 CFR 266.100(d)(2)(i)

— delete ''paragraph (c)(1)(iii)'' and replace with ''paragraph (d)(1)(iii)''

(I) 40 CFR 266.100(d)(2)(ii)

— delete ''paragraph (c)(1)(iii)'' and replace with ''paragraph (d)(1)(iii)''

(J) 40 CFR 266.100(d)(3) introductory paragraph

— delete the paragraph in its entirety and replace with the following: ''(3) To be exempt from 40 CFR 266.102 to 266.111, inclusive, an owner or operator of a (a) nickel-chromium recovery furnace; (b) a mercury recovery furnace, other than a mercury recovery furnace that an owner or operator claims is exempt under 40 CFR 266.100(d)(1); (c) a lead recovery furnace, other than a lead recovery furnace subject to regulation under 40 CFR 63, subpart X (the Secondary Lead Smelting NESHAP); or (d) a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing, shall comply with the requirements

of 40 CFR 266.100(d)(1)(i) to (iii), inclusive, for each waste that an owner or operator claims is regulated under 40 CFR 266.100(d)(3). In addition, to be exempt from 40 CFR 266.102 to 266.111, inclusive, an owner or operator must comply with the following additional requirements:''

(K) 40 CFR 266.100(d)(3)(i)

— delete ''paragraph (c)(1)'' and replace with ''paragraph (d)(1)''

(L) 40 CFR 266.100(d)(3)(i)(A)

— delete ''appendix IX'' and replace with ''appendix XI''

(M) 40 CFR 266.100(d)(3)(i)(C)

— delete ''; and'' and replace with ''.''

(N) 40 CFR 266.100(d)(3)(ii)

— after ''basis'' add ''that an owner or operator is not processing hazardous waste solely for metal recovery, or''

— delete ''that situation'' and replace with ''either situation''

— after ''comment,'' add ''the owner or operator of''

(O) 40 CFR 266.100(g)(2)

— delete the paragraph in its entirety and replace with the following: ''(2) Submit for the commissioner's review and approval a waste analysis plan describing how the owner or operator will sample and analyze hazardous waste to demonstrate that the waste is burned for recovery of economically significant amounts of precious metals and thereby comply with, and maintain compliance with, the requirements of 40 CFR 266.100(g). Such plan shall include, but not be limited to the parameters to be tested, the rationale for the proposed parameters, how analysis of these parameters will provide sufficient information to comply with this paragraph, the frequency of sampling and proposed test methods specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 40 CFR 260.11. The owner or operator may propose another test method if SW-846 does not prescribe a method for a particular determination. The owner or operator shall implement the waste analysis plan approved by the commissioner; and''

(P) 40 CFR 266.100(g)(3)

— after ''metal'' add ''and all waste sampling and analysis results and all other records needed to comply with 40 CFR 266.100(g)(2)''

(Q) 40 CFR 266.100(g)

— add a new paragraph (4) as follows: ''(4) The commissioner may decide on a case-by-case basis that a person is not processing hazardous waste for recovery of economically significant amounts of precious metals, or that the processing of hazardous waste for recovery of economically significant amounts of precious metals in smelting, melting and refining furnaces, exempt from the requirements of 40 CFR 266.101 to 266.111, inclusive, as described in the introductory paragraph of 40 CFR 266.100(g), may pose a hazard to human health or the environment. In either situation, after adequate notice and opportunity for comment, the commissioner may determine that the owner or operator of any such shall comply with the requirements of 40 CFR 266.101 to 266.111, inclusive.''

(R) 40 CFR 266.100(h)

— after the first occurrence of ''under'' add ''40 CFR 63, subpart X and''

— add a new paragraph (1) as follows: ''(1) The commissioner may decide on a case-by-case basis that a person is not processing hazardous waste for recovery of lead, or that the processing of hazardous waste for recovery of lead, exempt from the requirements of 40 CFR 266.102 to 266.112, inclusive, as described in 40 CFR 266.100(h), may pose a hazard to human health and the environment. In either

situation, after adequate notice and opportunity for comment, the commissioner may determine that the owner or operator of any such lead recovery furnace shall comply with the requirements of 40 CFR 266.102 to 266.112, inclusive.''

(S) 40 CFR 266.101(c)(1)

— delete the first occurrence of ''storage and treatment'' and replace with ''both storage or treatment activities undertaken''

— delete the last occurrence of ''storage and treatment'' and replace with ''storage or treatment''

(T) 40 CFR 266.102(e)(3)(i)(E)

— delete ''§ 266.111(b)'' and replace with ''40 CFR 266.105(a)''

(U) 40 CFR 266.106(d)(1)

— delete the first appearance of the phrase ''dispersion modeling to predict the maximum annual average off-site ground level concentration for each''

(V) 40 CFR 266.112(b)(2)(i)

— delete the entire paragraph and replace it with the following: ''(i) Nonmetal constituents. For each nonmetal toxic constituent of concern specified in paragraph (b)(1) of this section, the concentration in the waste-derived residue shall not exceed the levels defined as the land disposal restriction limits specified in 40 CFR 268.40 for F039 nonwastewaters. In complying with 40 CFR 268.43 for FO39 nonwastewater levels for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans, an owner or operator must perform and retain analyses for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzo furans, total tetrachorodibenzo-p-dioxins, and total tetrachlorodibenzofurans. An owner or operator may demonstrate compliance with this requirement by achieving a detection limit for the constituent that does not exceed an order of magnitude above the level specified in 40 CFR 268.40 for F039 nonwastewaters; and''

(3) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsections (b) to (e), inclusive, of this section shall apply.

(b) **Recyclable Materials Utilized for Precious Metals Recovery**

(1) In addition to the requirements in 40 CFR 266.70:

(A) Any person that stores recyclable materials specified in 40 CFR 266.70(a) shall mark all containers and tanks holding these materials so that their contents are clearly identified and the date upon which each period of accumulation begins is clearly marked and visible for inspection. Notwithstanding the foregoing, when marking the beginning of each period of accumulation for materials accumulated or stored in tanks, the person accumulating or storing such materials does not have to mark the tank but may maintain a written log noting the date upon which each period of accumulation begins, provided such log is maintained in the facility operating record and is available for inspection.

(B) Any person that recycles recyclable materials specified in 40 CFR 266.70(a) shall comply with the following requirements:

(i) Registration, which consists of the notification requirements under section 3010 of RCRA (42 USC 6930) and the filing of a completed recyclable materials registration on a form prescribed by the commissioner which shall include, but not be limited to, the information listed in 40 CFR 270.13. Said registration shall be submitted to the commissioner no later than thirty days prior to engaging in the recycling of recyclable materials; and

(ii) The filing of a report every two years that satisfies all of the requirements of 40 CFR 264.75, including but not limited to, use of the prescribed form. Unless another time is prescribed by the commissioner in writing, such report shall be submitted to the commissioner no later than March 1 of each even numbered year.

(c) **Spent Lead-Acid Batteries Being Reclaimed**

(1) Persons who generate, transport, store or collect spent lead-acid batteries that are recyclable materials (''spent batteries'') for recycling, or who reclaim, including regenerate, spent batteries, shall comply with the requirements in 40 CFR 261, 40 CFR 262.11, the inspection log requirements in 40 CFR 265.15(d), and the requirements of this subsection unless such batteries are being managed under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies:

(A) while accumulated or stored, spent batteries shall not be opened, handled or stored in a manner which may rupture the battery case, cause it to leak, or produce short circuits;

(B) Spent batteries shall not be stored or accumulated near incompatible materials unless they are protected from the other materials by means of a dike, berm, wall, or other device to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials;

(C) Spent batteries shall be stored or accumulated on an impervious surface and inspected weekly for leaks and deterioration; and

(D) No person shall store or accumulate greater than 20,000 kilograms of spent batteries at any one time unless they have submitted to the Commissioner a completed spent battery accumulation registration. The registration shall be submitted on such forms as prescribed by the Commissioner, and shall include the information listed in 40 CFR 270.13 and any other information which the Commissioner deems necessary to determine the potential impact on the environment. Said registration shall be filed no later than thirty days prior to accumulating greater than 20,000 kilograms of spent batteries.

(2) In addition, for spent batteries that are reclaimed in a manner other than regeneration, the person who generates, collects, transports, stores but does not reclaim, or reclaims but does not store, such batteries shall comply with all applicable provisions in 40 CFR 268.

(3) Owners or operators of facilities operating under interim status that store spent lead acid batteries, before reclaiming them, other than through regeneration, are subject to the following requirements: (1) notification requirements under section 3010 of RCRA (42 USC 6930); (2) 40 CFR 261; (3) 40 CFR 262.11; (4) All applicable provisions in subparts A, B, (but not 40 CFR 265.13 (waste analysis)), C, D, E (but not 40 CFR 265.71 and 265.72 (dealing with use of the manifest and manifest discrepancies)), and F to L, inclusive, of 40 CFR 265; and (5) All applicable provisions in 40 CFR 268, 270 and 124.''

(4) The following requirements are applicable to the owner or operator of a facility issued a permit under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies, that stores spent lead acid batteries before reclaiming them, other than through regeneration: (1) notification requirements under section 3010 of RCRA (42 USC 6930); (2) 40 CFR 261; (3) 40 CFR 262.11; (4) all applicable provisions in subparts A, B (but not 40 CFR 264.13 (waste analysis)), C, D, E (but not 40 CFR 264.71 or 264.72 (dealing with the use of the manifest and manifest discrepancies)), and F to L, inclusive, of 40 CFR 264; and (5) all applicable provisions in 40 CFR 268, 270 and 124.

(5) Persons who generate, transport, store or collect spent lead-acid batteries other than for recycling or who dispose of spent batteries are subject to all applicable requirements of sections 22a-449(c)-100 to 110, inclusive, of the Regulations of Connecticut State Agencies, unless such batteries are being managed under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies, in which case the provisions of section 22a-449(c)-113 of the Regulations of Connecticut State Agencies shall apply.

(6) For purposes of this subsection, the terms ''regenerate'' or ''regeneration'' mean replacing drained electrolyte fluids or replacing non-functional battery cells.

(d) **Wastewater Treatment Sludges from the Production of Ethylene Dichloride or Vinyl Chloride Monomer**

(1) For purposes of this subsection only, ''sludge'' or ''sludges'' means wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from co-mingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater).

(2) Persons who generate sludges shall comply with 40 CFR 262.11, but otherwise shall not be subject to section 22a-449(c)-102 of Regulations of Connecticut State Agencies provided:

(A) such sludges, other than meeting the listing description for K174, are not otherwise a hazardous waste under 40 CFR 261 subparts C or D;

(B) all such sludges are disposed of in a landfill, including a landfill authorized to receive non-hazardous waste, provided any such landfill has a valid and effective permit issued by the commissioner that authorizes the disposal of such sludges or if the landfill is not in Connecticut, the landfill has all the necessary federal, state or local permits, licenses or authorizations, authorizing the disposal of such sludge:

(C) all such sludges are not placed on the land prior to final disposal; and

(D) the generator of such sludges retains the following records:

(i) documentation demonstrating that all such sludges were disposed of, or were consigned to a transporter or disposal facility pursuant to a written agreement to dispose of all such sludges, in a landfill meeting the requirements of subparagraph (B) of this subdivision;

(ii) if the sludges are disposed of in a landfill in Connecticut, all special waste authorizations issued by the commissioner pursuant to section 22a-209-(8) of the Regulations of Connecticut State Agencies regarding the disposal of all such sludges; and

(iii) all bills of lading, contracts or similar records regarding the transportation and disposal of such sludges.

(3) Persons who transport, treat, store or dispose of sludges shall not be subject to sections 22a-449(c)-11, 103, 104, 105 or 110 of the Regulations of Connecticut State Agencies, as applicable, regarding the transportation, treatment, storage or disposal of such sludges, provided:

(A) such sludges, other than meeting the listing description for K174, are not otherwise a hazardous waste under 40 CFR 261 subparts C or D;

(B) all such sludges are disposed of in a landfill, including a landfill authorized to receive non-hazardous waste, provided any such landfill has a valid and effective permit issued by the commissioner that authorizes the disposal of such sludges or if the landfill is not in Connecticut, the landfill has all the necessary federal, state and local permits, licenses or authorizations, authorizing the disposal of such sludge; and

(C) all such sludges are not placed on the land prior to final disposal.

(4) Persons who generate, transport, treat, store or dispose of sludges shall be subject to all applicable provisions of sections 22a-449(c)-100 to 110, inclusive, of the Regulations of Connecticut State Agencies, and cannot claim that such sludges are regulated under this subsection, if any condition in subdivisions (2) or (3) of this subsection is not met.

(5) Respondents in actions to enforce the provisions of this subsection who raise a claim that sludges are exempt from regulation under subdivision (2) or (3) of this subsection shall, upon a showing by the Department that the respondent generated, transported, treated, stored or disposed of sludges, demonstrate that they complied with all of the applicable conditions specified in subdivision (2) or (3) of this subsection. In doing so, respondents shall provide appropriate documentation (e.g., contracts between the generator and transporter or between the generator and landfill owner or operator, invoices, bills of lading, special waste authorizations, permits) demonstrating that the conditions in subdivision (2) or (3), as applicable, were satisfied.

(e) **Additional Requirements for Used or Fired Military Munitions**

If a used or fired military munition lands off-range and is not promptly rendered safe or retrieved, any imminent and substantial threat associated with any remaining material shall be addressed by the person who fired the munition or, if different, the owner or operator of the range. If remedial action is infeasible, the operator of the range shall maintain a record of the event for as long as any threat remains. The record shall include the type of munition and its location (to the extent the location is known).

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002)

Sec. 22a-449 (c)-107. Reserved

Sec. 22a-449(c)-108. Land disposal restrictions

(a) **Incorporation by Reference**

(1) 40 CFR 268 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 268.1(c)(3) (which relates to disposal of hazardous wastes into injection wells);

(B) 40 CFR 268.13 (which relates to the federal schedule for the land disposal restrictions program);

(C) 40 CFR 268.37(b) (which relates to wastes managed in systems defined as Class V injection wells); and

(D) 40 CFR 268.50(g)

(which relates to the applicability of certain storage prohibitions).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 268.1(f) introductory paragraph

— in the second sentence, after ''handlers'' add ''and transporters''

— after ''273'' add ''and section 22(a)-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(B) 40 CFR 268.1(f)(3)

— delete ''and''

(C) 40 CFR 268.1(f)(4)

— delete the period and replace with ''; and''

— add a new paragraph (5) as follows: ''(5) Used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies.''

(D) 40 CFR 268.2(c)

— delete ''or staging pile''

(E) 40 CFR 268.7(a)(2)

— delete ''With the initial shipment of waste to each treatment or storage facility, the generator must send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the file. The notice'' and replace with ''(A) with the initial shipment of waste the generator shall send a one-time written notice which conforms to the requirements of 40 CFR 268.7(a)(2), to each treatment or storage facility receiving the waste. If the generator's waste changes so that the initial notice is no longer accurate or is incorrect, with the initial shipment of each such changed waste, the generator shall send a new one-time written notice to each treatment or storage facility receiving the waste. If the generator changes the treatment or storage facility to which it sends its waste, with the initial shipment of waste to such facility, the generator shall send a new one-time written notice regardless of whether the treatment or storage facility has received such waste in the past; and (B) with the initial shipment of contaminated soil the generator shall send a one-time written notice and certification that conforms to the requirements of 40 CFR 268.7(a)(2) and 40 CFR 268.7(a)(2)(i), to each treatment or storage facility receiving the contaminated soil. If the generator's contaminated soil changes so that the initial notice and certification are no longer accurate or are incorrect, with the initial shipment of each such changed contaminated soil, the generator shall send a new one-time written notice and certification to each treatment or storage facility receiving the contaminated soil. If the generator changes the treatment or storage facility to which it sends its contaminated soil, with the initial shipment of contaminated soil to such facility, the generator shall send a new one-time written notice and certification, regardless of whether the treatment or storage facility has received such contaminated soil in the past.

If the waste or contaminated soil changes so that it is no longer subject to 40 CFR 268.7(a)(2) but is subject to the requirements of 40 CFR 268.7(a)(3), (4), (7) or (9), the generator shall comply with the notification and certification requirements of each applicable regulation. The generator shall retain a copy of each notice required by this paragraph in its files at the location where the waste or contaminated soil is generated.

Each notice required by 40 CFR 268.7(a)(2)''

— delete ''No further notifications is necessary until such time that the waste or facility change, in which case a new notification must be sent and a copy placed in the generator's file.''

(F) 40 CFR 268.7(a)(3)(i)

— delete ''to each treatment, storage or disposal facility receiving the waste, and place a copy in the file. The notice'' and replace with ''and certification, that conforms to the requirements of 40 CFR 268.7(a)(3)(i), to each treatment, storage, or disposal facility receiving the waste. If the generator's waste changes so that the initial notice or certification is no longer accurate or is incorrect, with the initial shipment of each such changed waste, the generator shall send a new one-time written notice and certification to each treatment, storage or disposal facility receiving the waste. If the generator changes the treatment, storage or disposal facility to which it sends its waste, with the initial shipment of waste to such facility, the generator shall send a new one-time written notice and certification regardless of whether the

treatment, storage or disposal facility has received such waste in the past. If a generator's waste changes so that it is no longer subject to 40 CFR 268.7(a)(3) but is subject to the requirements of 40 CFR 268.7(a)(2), (4), (7)or (9), the generator shall comply with the notification and certification requirements of each applicable regulation. The generator shall retain a copy of each notice and certification required by this paragraph in its files at the location where the waste is generated.

Each notice required by 40 CFR 268.7(a)(3)(i)''

(G) 40 CFR 268.7(a)(3)(ii)

— delete ''wastes'' and replace with ''contaminated soil''

— delete ''receiving the waste and place a copy in the file.'' and replace with ''receiving the contaminated soil. If the contaminated soil changes so that the initial notice is no longer accurate or is incorrect, with the initial shipment of each such changed contaminated soil, the generator shall send a new one-time written notice to each treatment, storage or disposal facility receiving the contaminated soil. If the generator changes the treatment, storage or disposal facility to which it sends its contaminated soil, with the initial shipment of contaminated soil to such facility, the generator shall send a new one-time written notice regardless of whether the treatment, storage or disposal facility has received such contaminated soil in the past. If the contaminated soil changes so that it is no longer subject to 40 CFR 268.7(a)(3), but is subject to the requirements of 40 CFR 268.7(a)(2), (4), (7) or (9), the generator shall comply with the notification and certification requirements of each applicable regulation. The generator shall retain a copy of each notice required by this paragraph in its files at the location where the contaminated soil is generated.

Each notice required by 40 CFR 268.7(a)(3)(ii)''

(H) 40 CFR 268.7(a)(3)(iii)

— delete ''If the waste changes, the generator must send a new notice and certification to the receiving facility, and place a copy in their files.''

(I) 40 CFR 268.7(a)(4)

— delete ''when exceptions allow certain wastes or contaiminated soil that do not meet the treatment standards to be land dispsosed: there'' and replace with ''there''

— delete ''with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice'' and replace with ''with the initial shipment of waste or contaminated soil, the generator shall send a one-time written notice which conforms to the notice requirements of 40 CFR 268.7(a)(4) to each facility receiving its waste or contaminated soil. If the basis for an exemption changes, with the initial shipment of the waste or contaminated soil after each such change, the generator shall send a new one-time written notice to each facility receiving the waste or contaminated soil that conforms to the requirements of 40 CFR 268.7(a)(4). If the generator changes the facility to which it sends its waste or contaminated soil, with the initial shipment of waste or contaminated soil to such facility, the generator shall send a new one-time written notice that conforms to the requirements of 40 CFR 268.7(a)(4), regardless of whether the facility has received such waste or contaminated soil in the past. If a generator's waste or contaminated soil changes so that it is no longer subject to 40 CFR 268.7(a)(4) but is subject to the requirements of 40 CFR 268.7(a)(2), (3), (7) or (9), the generator shall comply with the notification and certification requirements of each applicable regulation. The generator shall retain a copy of each notice required by this paragraph in its files at the location where the waste or contaminated soil is generated.

Each notice required by 40 CFR 268.7(a)(4)''

— delete ''If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in their files.''

(J) 40 CFR 268.7(a)(7)

— delete ''in the facility's on-site files'' and replace with ''on-site in the generator's file''

(K) 40 CFR 268.7(a)(9)(i)

— delete ''to a treatment facility'' and replace with ''to a treatment, storage or disposal facility''

(L) 40 CFR 268.7(a)(9)(ii)

— delete the paragraph in its entirety and replace with the following: ''(ii) If the wastes in the lab pack change so that the initial notice provided under 40 CFR 268.7(a)(9)(i) is no longer accurate or is incorrect, with the initial shipment of each lab pack containing changed wastes, the generator shall send a new one-time written notice and certification, that complies with the requirements of 40 CFR 268.7(a)(9)(i), to each treatment, storage or disposal facility receiving the waste. If the generator changes the treatment, storage or disposal facility to which it sends a lab pack containing hazardous waste, with the initial shipment of the lab pack to such facility, the generator shall send a new one-time written notice and certification, that complies with the requirements of 40 CFR 268.7(a)(9)(i), regardless of whether the treatment, storage or disposal facility has received lab pack wastes from the generator in the past. If the lab pack waste changes so that it is no longer subject to 40 CFR 268.7(a)(9), but is subject to the requirements of 40 CFR 268.7(a)(2), (3), (4), or (7), the generator shall comply with the notification and certification requirements of each applicable regulation. The generator shall retain a copy of each notice required by this paragraph in its files at the location where the lab pack waste is generated.''

(M) 40 CFR 268.7(b)(3)

— delete ''A one-time notice must be sent'' and replace with ''The owner or operator of a treatment facility must send a one-time notice''

— delete ''placed'' and replace with ''retained''

(N) 40 CFR 268.7(b)(3)(i)

— delete the paragraph in its entirety and replace with the following: ''(i) If the treatment facility's waste or contaminated soil changes so that the initial notice provided under 40 CFR 268.7(b)(3) is incorrect or is no longer accurate, with the initial shipment of any such changed waste or contaminated soil, the owner or operator shall send a new one-time written notice, that complies with the requirements of 40 CFR 268.7(b)(3)(ii), to each land disposal facility receiving the waste or contaminated soil. If the treatment facility changes the land disposal facility to which it sends its waste or contaminated soil, with the initial shipment of waste or contaminated soil to such facility, the owner or operator shall send a new one-time written notice, that complies with the requirements of 40 CFR 268.7(b)(3)(ii), regardless of whether the land disposal facility has received waste or contaminated soil from the owner or operator of the treatment facility in the past. If the waste or contaminated soil changes so that it is no longer subject to 40 CFR 268.7(b)(3), but is subject to other applicable requirements, the owner or operator of the treatment facility shall comply with each applicable notification and certification requirement. The treatment facility shall maintain a copy of each notice required by this paragraph in the operating record for the treatment facility.''

(O) 40 CFR 268.7(b)(4)(i)

— delete ''must be placed'' and replace with ''required by 40 CFR 268.7(b)(4) shall be retained''

— delete ''if the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the file.'' and replace with ''if the waste or treatment residue of a restricted waste changes so that the initial certification provided by the owner or operator of the treatment facility is incorrect or is no longer accurate, with the initial shipment of any such changed waste or residue, the owner or operator shall send a new one-time written certification, that complies with the requirements of 40 CFR 268.7(b)(4), to each land disposal facility receiving the waste or residue. If the owner or operator of the treatment facility changes the land disposal facility to which it sends its waste or treatment residue of a restricted waste, with the initial shipment of such changed waste or residue, the owner or operator shall send a new one-time written certification, that complies with the requirements of 40 CFR 268.7(b)(4), regardless of whether the land disposal facility has received such waste or residue in the past. If the waste or treatment residue of a restricted waste changes so that it is no longer subject to 40 CFR 268.7(b)(4), but is subject to other applicable requirements, the owner or operator of the treatment facility shall comply with each applicable notification and certification requirement. The treatment facility shall maintain a copy of each certification required by this paragraph in the operating record for the treatment facility.''

(P) 40 CFR 268.7(b)(4)(ii)

— delete ''§ 261.3(e)'' and replace with ''40 CFR 261.3(f)''

(Q) 40 CFR 268.7(d)

— delete ''261.3(e)'' and replace with ''261.3(f)''

(R) 40 CFR 268.7(d)(1)

— delete the paragraph in its entirety and replace with '' (1) A one time notification shall be sent to the commissioner. Each such notice shall include the following information: (i) The name and address of the Subtitle D facility receiving the treated debris; (ii) A description of the hazardous debris as initially generated, including all applicable EPA Hazardous Waste Number(s); and (iii) For debris excluded under 40 CFR 261.3(f)(1), the technology from Table 1 in 40 CFR 268.45 used to treat the debris.''

(S) 40 CFR 268.7(d)(2)

— delete ''261.2(e)(1)'' and replace with ''261.3(f)''

(T) 40 CFR 268.7(d)(3)

— delete ''261.3(e)(1)'' and replace with ''261.3(f)''

(U) 40 CFR 268.7(e)(2)

— delete ''in the facility'' and replace with ''in the generator's or the facility's''

(V) 40 CFR 268.32 – 268.33

— delete ''§§ 268.32-268.33 [reserved]'' and replace with the following: ''Section 268.32 Waste specific prohibitions—Soils exhibiting the toxicity characteristic for metals and containing PCBS.

(a) Effective December 26, 2000, the following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (D004-D011) and containing PCBS.

(b) The requirements of 40 CFR 268.32(a) of this section do not apply if:

(1)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the treatment standards specified in 40 CFR 268, subpart D for EPA hazardous waste numbers D004-D011, as applicable; or

(2)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the alternative treatment standards specified in 40 CFR 268.49 for contaminated soil; or

(3) Persons have been granted an exemption from a prohibition pursuant to a petition under 40 CFR 268.6, with respect to those wastes and units covered by the petition; or

(4) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under 40 CFR 268.44.

Section 268.33 Waste specific prohibitions—Chlorinated aliphatic wastes.

(a) Effective May 8, 2001, the wastes specified as EPA hazardous wastes numbers K174 and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of 40 CFR 268.33(a) do not apply if:

(1) The wastes meet the applicable treatment standards specified in 40 CFR 268, subpart D;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under 40 CFR 268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under 40 CFR 268.44;

(4) Hazardous debris has met the treatment standards in 40 CFR 268.40 or the alternative treatment standards in 40 CFR 268.45;

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to the wastes covered by the extension; or

(6) The waste is being managed in compliance with subdivision (2) or (3), as applicable, of section 22a-449(c)-106(d) of the Regulations of Connecticut State Agencies.

(c) To determine whether the wastes specified in 40 CFR 261 as EPA hazardous wastes numbers K174 and K175 exceed the applicable treatment standards specified in 40 CFR 268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of 40 CFR 268, subpart D, the waste is prohibited from land disposal, and all requirements of 40 CFR 268 are applicable, except as otherwise specified.

(d) Disposal of the waste specified in 40 CFR 261 as EPA hazardous wastes number K175 that has complied with all applicable 40 CFR 268.40 treatment standards must also be macroencapsulated in accordance with 40 CFR 268.45 table 1 unless the waste is placed in: (1) a landfill that has a valid and effective permit issued by the commissioner pursuant to section 22a-449(c)-110 of the Regulations of Connecticut State Agencies or if the landfill is not in Connecticut, the landfill has all the federal, state or local permits, licenses or authorizations necessary for the disposal of hazardous waste, and contains only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards and no other wastes; or (2) a landfill that has a valid and effective permit issued by the commissioner pursuant to section 22a-449(c)-110 of the Regulations of Connecticut State Agencies or if the landfill

is not in Connecticut, the landfill has all the federal, state or local permits, licenses or authorizations necessary for the disposal of hazardous waste, with a dedicated landfill cell in which all other wastes being co-disposed with K175 wastes have a pH 6.0.''

(W) 40 CFR 268.37(a)

— delete Aor that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA),''

(X) 40 CFR 268.38(a)

— delete ''or that are injected in Class I deep wells regulated under the Safe Drinking Water Act (SDWA),''

(Y) 40 CFR 268.38(b)

— delete ''or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA),''

(Z) 40 CFR 268.39(b)

— delete ''or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA),''

(AA) 40 CFR 268.40(e)

— delete ''or that is injected into a Class I nonhazardous deep injection well''

(BB) 40 CFR 268.40 Table entitled ''Treatment Standards for Hazardous Wastes''

— revise the entry for waste code F039 by adding 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF), 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD), 1,2,3,4,6,7,8,9-octachlorodibenzofuran (OCDF), in alphabetical order and add new entries for K174 and K175 in alphanumeric order as follows:

Waste Code	Waste Description and Treatment /Regulatory Subcategory[1]	Regulated Hazardous Constituent		Wastewaters	Nonwastewaters
		Common Name	CAS[2] Number	Concentration in mg/l[3]; or Technology Code	Concentration in mg/l[3] unless noted as ''mg/l TCLP''; or Technology Code
* *	* * * * *	* * * *	* *	* * * *	* * * *
		* * * *	* *	* * * *	* * * *
		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	0.0025
		1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025
		1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
		1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	0.000063	0.005
		1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
* *	* * * * *	* * * *	* *	* * * *	* * * *
K174	Wastewater treatment sludges from the Production of ethylene dichloride or vinyl Chloride monomer (including sludges that Result form co-mingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater).	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035 or CMBST[11]	0.0025 or CMBST[11]
		1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035 or CMBST[11]	0.0025 or CMBST[11]
		1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF)	55673-89-7	0.000035 or CMBST[11]	0.0025 or CMBST[11]
		HxCDDs (All Hexachlorodibenzo-p-dioxins)	34465-46-8	0.000063 or CMBST[11]	0.001 or CMBST[11]
		HxCDFs (All Hexachlorodibenzofurans)	55684-94-1	0.000063 or CMBST[11]	0.001 or CMBST[11]
		(1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	0.000063 or CMBST[11]	0.005 or CMBST[11]
		(1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063 or CMBST[11]	0.005 or CMBST[11]
		PeCDDs (All Pentachlorodibenzo-p-dioxins)	36088-22-9	0.000063 or CMBST[11]	0.001 or CMBST[11]
		PeCDFs (All Pentachlorodibenzofurans)	30402-15-4	0.000063 or CMBST[11]	0.001 or CMBST[11]
		TCDDs (All tetrachlorodi-benzo-p-dioxins)	41903-57-5	0.000063 or CMBST[11]	0.001 or CMBST[11]
		TCDFs (All tetrachlorodibenzofurans)	55722-27-5	0.000063 or CMBST[11]	0.001 or CMBST[11]
		Arsenic	7440-38-2	1.4	5.0 mg/L TCLP
K175	Wastewater treatment sludge from the Production of vinyl chloride monomer using Mercuric chloride catalyst in an acetylene-Based process.	Mercury[12]	7438-97-6	NA	0.025 mg/L TCLP
		PH[12]		0.15	PH≤6.0
	All K175 wastewaters	Mercury	7438-97-6	0.15	NA
* *	* * * * *	* * *	* *	* * *	* * * *

— in the second column entitled ''Waste Description and Treatment/Regulatory Subcategory'' add the following to the end of the entries for Waste Codes K156, K157 and K158: ''(This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)''

— at the end of the table add the following footnote in numeric order: ''[12]disposal of K175 wastes that have complied with all applicable 40 CFR 268.40 treatment standards must also be macroencapsulated in accordance with 40 CFR 268.45 Table 1 unless the waste is placed in: (1) a landfill that has a valid and effective permit issued by the commissioner pursuant to section 22a-449(c)-110 of the Regulations of Connecticut State Agencies or if the landfill is not in Connecticut, the landfill has all the federal, state or local permits, licenses or authorizations necessary for the disposal of hazardous waste, and contains only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards and no other wastes; or (2) a landfill that has a valid and effective permit issued by the commissioner pursuant to section 22A-449(c)-110 of the Regulations of Connecticut State Agencies or if the landfill is not in Connecticut, the landfill has all the federal, state or local permits, licenses or authorizations necessary for the disposal of hazardous waste, with a dedicated landfill cell in which all other wastes being co-disposed with K175 wastes have a pH ≤6.0.''

— delete footnote 9 and delete all references in the 40 CFR 268.40 table to footnote 9

(CC) 40 CFR 268.44(h)(5)

— at the end of the paragraph add the following: ''At a minimum, public notice as used in this paragraph shall include notice of the petition in a newspaper having substantial circulation in the municipality in which the site-specific variance is sought. The public comment period for any such petition shall, at a minimum, be thirty (30) days. If there is substantial public interest in a petition, the commissioner at his discretion may provide for additional public participation regarding the petition.''

(DD) 40 CFR 268.48 Table entitled ''Universal Treatment Standards''

— add to the subgroup ''Organic Constituents'' the following entries in alphabetical order:

REGULATED CONSTIUTENT Common Name	CAS[1] Number	Wastewater Standard	Nonwastewater Standard
		Concentration in mg/l[2]	Concentration in mg/kg[3] unless noted at ''mg/l'' TCLP''
* * * *	* *	* * *	* * * *
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
* * * *	* *	* * *	* * * *
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	0.000063	0.005
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
* * * *	* *	* * *	* * * *
Total PCBs (sum of all PCB isomers, or all Arcolors) except this standard shall not apply to soil exhibiting a hazardous characteristic due to D004 – D011 only.	1336-36-3	0.10	10
* * * *	* *	* * *	* * * *

— under the subgroup ''Organic Constituents'' delete the entry for 2,4,6-Tribromophenol in its entirety

— at the end of the table delete the editorial note following the footnotes

(EE) 40 CFR 268.49(d)

— delete ''and are present'' and replace with ''and that are present''

— at the end of the paragraph add the following: '' PCBs are not a constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals.''

(FF) 40 CFR 268 APPENDIX I-III [Reserved]

— delete ''APPENDIX I-III [Reserved]'' and replace with the following: ''APPENDIX I-II [Reserved]

Appendix III to 40 CFR 268-List of Halogenated Organic Compounds Regulated Under 40 CFR 268.32

In determining the concentration of HOCs in a hazardous waste for purposes of the 40 CFR 268.32 land disposal prohibition, the Department has defined the HOCs that must be included in a calculation as any compounds having a carbon-halogen bond which are listed in this Appendix (see 40 CFR 268.2). Appendix III to 40 CFR 268 consists of the following compounds:

I. Volatiles

1. Bromodichloromethane
2. Bromomethane
3. Carbon Tetrachloride
4. Chlorobenzene
5. 2-Chloro-1,3-butadiene
6. Chlorodibromomethane
7. Chloroethane
8. 2-Chloroethyl vinyl ether

9. Chloroform
10. Chloromethane
11. 3-Chloropropene
12. 1,2-Dibromo-3-chloropropane
13. 1,2-Dibromomethane
14. Dibromomethane
15. Trans-1,4-Dichloro-2-butene
16. Dichlorodifluoromethane
17. 1,1-Dichloroethane
18. 1,2-Dichloroethane
19. 1,1-Dichloroethylene
20. Trans-1,2-Dichloroethene
21. 1,2-Dichloropropane
22. Trans-1,3-Dichloropropene
23. cis-1,3-Dichloropropene
24. Iodomethane
25. Methylene chloride
26. 1,1,1,2-Tetrachloroethane
27. 1,1,2,2-Tetrachloroethane
28. Tetrachloroethene
29. Tribromomethane
30. 1,1,1-Trichloroethane
31. 1,1,2-Trichloroethane
32. Trichlorothene
33. Trichloromonofluoromethane
34. 1,2,3-Thrichloropropane
35. Vinyl Chloride

II. Semivolatiles

1. Bis(2-chloroethoxy)ethane
2. Bis(2-chloroethyl)ether
3. Bis(2-chloroisopropyl)ether
4. p-Chloroaniline
5. Chlorobenzilate
6. p-Chloro-m-cresol
7. 2-Chloronaphthalene
8. 2-Chlorphenol
9. 3-Chloropropionitrile
10. m-Dichlorobenzene
11. o-Dichlorobenzene
12. p-Dichlorobenzene
13. 3.3’-Dichlorobenzidine
14. 2,4-Dichlorophenol
15. 2,6-Dichlorophenol
16. Hexachlorobenzene
17. Hexachlorobutadiene
18. Hexachlorocyclopentadiene
19. Hexachloroethane
20. Hexachloroprophene
21. Hexachlorpropene
22. 4,4’-Methylenebis(2-chloroanaline)

23. Pentachlorobenzene
24. Pentachloroethane
25. Pentachloronitrobenzene
26. Pentachlorophenol
27. Pronamide
28. 1,2,4,5-Tetrachlorobenzene
29. 2,3,4,6-Tetrachlorophenol
30. 1,2,4-Trichlorobenzene
31. 2,4,5-Trichlorophenol
32. 2,4,6-Trichlorophenol
33. Tris(2,3-dibromopropyl)phosphate

III. Organochlorine Pesticides

1. Aldrin
2. alpha-BHC
3. beta-BHC
4. delta-BHC
5. gamma-BHC
6. Chlorodane
7. DDD
8. DDE
9. DDT
10. Dieldrin
11. Endosulfan I
12. Endosulfan II
13. Endrin
14. Endrin aldehyde
15. Heptachlor
16. Heptachlor epoxide
17. Isodrin
18. Kepone
19. Methoxyclor
20. Toxaphene

IV. Phenoxyacetic Acid Herbicides

1. 2,4-Dichlorophenoxyacetic acid
2. Silvex
3. 2,4,5-T

V. PCBs

1. Aroclor 1016
2. Aroclor 1221
3. Aroclor 1232
4. Aroclor 1242
5. Aroclor 1248
6. Aroclor 1254
7. Aroclor 1260
8. PCBs not otherwise specified

VI. Dioxins and Furans

1. Hexachlorodibenzo-p-dioxins
2. Hexachlorodibenzofuran
3. Pentachlorodibenzo-p-dioxins
4. Pentachlorodibenzofuran

5. Tetrachlorodibenzo-p-dioxins
6. Tetrachlorodibenzofuran
7. 2,3,7,8-Tetrachlorodibenzo-p-dioxin''

(GG) 40 CFR 268 Appendix VII – Table 1 entitled ''Effective Dates of Surface Disposed Wastes (Non-Soil and Debris) Regulated in the LDRS—Comprehensive List

— add the following wastestream in alphanumeric order (by the first column):

Waste code	Waste category	Effective date
* * * *	* * * *	* * * *
U048	All	Aug. 8, 1990.
* * * *	* * * *	* * * *

(3) In addition to the provisions incorporated by reference in subdivsions (1) and (2) of this subsection, the provisions in subsections (b) and (c) of this section shall also apply.

(b) **Underground Injection**

Notwithstanding the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the treatment, storage or disposal of hazardous waste by underground injection is prohibited.

(c) **Other Applicable State Provisions**

In addition to the provisions of subsections 22a-449(c)-108(a) and (b) of the Regulations of Connecticut State Agencies, a person shall also comply with all applicable state requirements, including, but not limited to, sections 22a-133k-1 to 22a-133k-3, inclusive, of the Regulations of Connecticut State Agencies.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002)

Sec. 22a-449 (c)-109. Reserved

Sec. 22a-449(c)-110. The hazardous waste permit program

(a) **Incorporation by Reference**

(1) 40 CFR 270, 40 CFR 124.13, 40 CFR 124.31, 40 CFR 124.32, 40 CFR 124.33, and the provisions of 40 CFR 124 listed in 40 CFR 271.14 applicable to RCRA permits, are incorporated by reference in their entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 270.1 (a) and (b) (which relates to the scope OF 40 CFR 270);

(B) 40 CFR 270.1(c)(1)(i) (which relates to underground injection);

(C) 40 CFR 270.1(c)(2)(ix) (which relates to a facility in New York);

(D) 40 CFR 270.1(c)(7) (which relates to enforceable documents for post-closure care);

(E) 40 CFR 270.10(e)(2) (which relates to extending certain deadlines);

(F) 40 CFR 270.10(g)(1)(i) (which relates to updating certain permit applications)

(G) 40 CFR 270.11(d)(2)

(which relates to a certification for a remedial action plan);

(H) 40 CFR 270.12 (which relates to confidentiality of information);

(I) 40 CFR 270.19(e)

(which relates to compliance with 40 cfr 63, subpart EEE);

(J) 40 CFR 270.22 introductory paragraph (which relates to compliance with 40 CFR 63, subpart EE);

(K) 40 CFR 270.28 (which relates to certain post-closure permit requirements);

(L) 40 CFR 270.42(f)(2) and (3) (which related to procedures for appealing permit modification decisions);

(M) 40 CFR 270.42(h) (which relates to certain permit modifications for military munitions);

(N) 40 CFR 270.42(i) (which relates to a list of permit modifications);

(O) 40 CFR 270.42(j) (which relates to combustion facility changes to meet 40 CFR 63 MACT standards);

(P) 40 CFR 270.42, Appendix I, item L(9) (which relates to technology changes to meet 40 CFR 63 standards);

(Q) 40 CFR 270.51 (which relates to expiring permits);

(R) 40 CFR 270.60(b) (which relates to underground injection wells);

(S) 40 CFR 270.62 introductory paragraph (which relates compliance with 40 CFR 63, subpart EEE);

(T) 40 CFR 270.64 (which relates to interim permits for underground injection control wells);

(U) 40 CFR 270.66 introductory paragraph (which relates compliance with 40 CFR 63, subpart EEE);

(V) 40 CFR 270.68 (which relates to remedial action plans);

(W) 40 CFR 270.72(b)(8) (which relates to compliance with 40 CFR 63 standards);

(X) 40 CFR 270, subpart H (which relates to remedial action plans);

(Y) 40 CFR 124.5(d)(2) and (3)(which relates to EPA-issued permits);

(Z) 40 CFR 124.10(c)(1)(viii) (which relates to injection well underground injection control permits).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 270.1(c) introductory paragraph

— delete ''or obtain an enforceable document in lieu of a post-closure permit, as provided under paragraph (c)(7) of this section''

(B) 40 CFR 270.1(c)(2)(vii)

— delete each occurrence of ''absorbent'' and replace with ''sorbent''

(C) 40 CFR 270.1(c)(2)(viii) introductory paragraph

— in the second sentence, after ''handlers'' add ''and transporters''

— after ''273'' add ''and section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies''

(D) 40 CFR 270.1(c)(2)(viii)(C)

— delete ''and''

(E) 40 CFR 270.1(c)(2)(viii)(D)

— delete the period and replace with ''; and''

— add a new paragraph (E) as follows: ''(E) used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies.''

(F) 40 CFR 270.2

— add ''Except as provided for in section 22a-449(c)-100(c) of the Regulations of Connecticut State Agencies'' to the beginning of the introductory paragraph

— under the definition of ''Application'', delete ''national''

— delete the definition of ''Remedial Action Plan (RAP)'' in its entirety

(G) 40 CFR 270.4(a)

— delete the entire paragraph and replace with the following: ''Any requirement not included in a permit which becomes effective by statute or regulation after such permit is issued and is not made specifically inapplicable to permitted facilities shall apply to such facilities. Notwithstanding this provision, any such permit shall

remain valid and enforceable and the owner or operator shall comply with both such permit and any such requirement. In the event of any conflict between the permit and any such requirement, the owner or operator shall comply with the more stringent requirement, provided that if the owner or operator does not fully comply with the more stringent requirement, DEP may enforce either requirement.''

(H) 40 CFR 270.6(b)

— delete ''These incorporations by reference were approved by the Director of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the Federal Register.''

(I) 40 CFR 270.10(e)(4)

— delete the first two sentences and replace with ''The commissioner may require the owner or operator of an existing hazardous waste management facility to submit part B of their permit application.''

(J) 40 CFR 270.10(f)(2)

— delete ''Regional Administrator if at the time of application the state in which the new hazardous waste management facility is proposed to be located has not received interim or final authorization for permitting such facility; otherwise it shall be filed with the''

(K) 40 CFR 270.10(g)(1)(ii)

— delete '', if the facility is located in a State which has obtained interim or final authorization,''

— delete ''that State'' and replace with ''Connecticut''

(L) 40 CFR 270.10(g)(1)(iii)

— delete ''the Regional Administrator if the State in which the facility in question is located does not have interim or final authorization; otherwise it shall be filed with the State Director (if the State has an analogous provision)'' and replace with ''the commissioner''

(M) 40 CFR 270.11(d)(1)

— after ''paragraph (a) or (b) of this'' insert ''section''

(N) 40 CFR 270.14(a)

— delete ''For post-closure permits, only the information specified in § 270.28 is required in Part B of the permit application.''

(O) 40 CFR 270.14(b)(18)

— delete ''§ 264.149 or''

(P) 40 CFR 270.14(b)(22)

— after '' § 124.31(c)'' add ''and documentation that notice has been provided as required by 40 CFR 124.31(d)''

(Q) 40 CFR 270.19(a)

— delete ''§ 264.340(b) or (c)'' and replace with ''40 CFR 264.340(c) or (d)''

(R) 40 CFR 270.19(d) introductory paragraph

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

(S) 40 CFR 270.27(a)(3)

— after ''appendix B'' add ''and any applicable state air pollution control requirement''

(T) 40 CFR 270.29

— at the end of the paragraph add the following, ''In addition, if the commissioner denies the permit application and the owner or operator of the facility has not fully and completely satisfied the requirements of 40 CFR 264, Subpart G, then notwithstanding such denial, the owner or operator of the facility shall comply with

the provisions of 40 CFR 264, Subparts G and H and all requirements referenced therein.''

(U) 40 CFR 270.30(k)(3)

— at the end of the paragraph add the following: ''In addition, the provisions of sections 22a-6o and 22a-6m of the Connecticut General Statutes shall apply to the transfer of any permit.''

(V) 40 CFR 270.32(a)

— delete ''and for EPA issued permits only,''

(W) 40 CFR 270.32(b)(2)

— delete ''Administrator or''

(X) 40 CFR 270.32(c)

— delete the entire paragraph and replace with, ''Except as provided for in section 22a-449(c)-110(a)(2)(E) of the Regulations of Connecticut State Agencies, for a state issued permit, an applicable requirement is a state statutory or regulatory requirement which takes effect prior to final administrative disposition, modification, or revocation and reissuance, of a permit.''

(Y) 40 CFR 270.40(a)

— at the end of the paragraph add the following: ''In addition, the provisions of sections 22a-6o and 22a-6m of the Connecticut General Statutes shall apply to the transfer of any permit.''

(Z) 40 CFR 270.41

— add a new paragraph (d) as follows: ''(d) In addition to the provisions of this section, a permit may be modified or revoked and reissued for any reason provided for or authorized by law, including but not limited to, section 22a-6m of the Connecticut General Statutes.''

(AA) 40 CFR 270.42(a)(1)(ii)

— delete ''40 CFR 124.10(c)(viii)'' and replace with ''40 CFR 124.10(c)(1)(ix)''

— delete ''40 CFR 124.10(c)(ix)'' and replace with ''40 CFR 124.10(c)(1)(x)''

(BB) 40 CFR 270.42(b)(2)

— after ''the permittee must'' in the beginning of the first sentence add ''comply with section 22a-6g of the Connecticut General Statutes and''

— delete ''40 CFR 124.10(c)(ix)'' and replace with ''40 CFR 124.10(c)(1)(x)''

(CC) 40 CFR 270.42(b)(5)

— redesignate the existing paragraph as 270.42(b)(5)(i) and add a new paragraph 270.42(b)(5)(ii) as follows: ''(ii) The commissioner shall provide a notice of any tentative determination regarding the permit modification request as provided for in section 22a-6h of the Connecticut General Statutes.''

(DD) 40 CFR 270.42(b)(7)

— delete ''or'' after 270.42(b)(7)(ii)

— delete the period after 270.42(b)(7)(iii) and replace with ''; or''

— add a new paragraph (iv) as follows: ''(iv) Any reason provided for or authorized by law, including but not limited to, section 22a-6m of the Connecticut General Statutes.''

(EE) 40 CFR 270.42(c)(2)

— after ''the permittee must'' in the beginning of the first sentence add ''comply with section 22a-6g of the Connecticut General Statutes and''

(FF) 40 CFR 270.42(d)(1)

— after ''section, the'' in the first sentence add ''modification shall be considered a class 3 modification. The''

(GG) 40 CFR 270.42(f)(1)

— after the term ''local government'' add ''and if requested, any person who provided oral or written comments regarding the modification request''

(HH) 40 CFR 270.42 Appendix I – Classification of Permit Modification

— delete modifications D.3.g. and N.3.

(II) 40 CFR 270.43

— delete ''or'' after 270.43(a)(2)

— delete the period after 270.43(a)(3) and replace with ''; or''

— add a new paragraph (4) as follows: ''(4) Any reason provided for or authorized by law, including but not limited to, section 22a-6m of the Connecticut General Statutes.''

(JJ) 40 CFR 270.43(b)

— delete ''procedures in part 124 or part 22, as appropriate, or''

(KK) 40 CFR 270.62(b)(5)

— delete ''shall'' and replace with ''may, in the commissioner's discretion,''

(LL) 40 CFR 270.62(b)(6)

— delete the first occurrence of ''Director'' and replace with ''applicant''

— after the first occurrence of ''trial burn'' add ''approved by the commissioner''

— delete ''the Director has issued such notice'' and replace with ''the applicant complies with the notice requirements of this paragraph and the commissioner provides the applicant with a written notice stating that the trial burn may commence''

(MM) 40 CFR 270.62(b)(6)(i)

— after ''mailed'' add ''by the applicant''

— delete ''not'' in the second sentence

— delete ''due to circumstances beyond the control of the facility or the permitting agency'' and replace with ''or rescheduled''

(NN) 40 CFR 270.62(d)

— delete ''The Director must announce his or her intention to approve the trial burn plan in accordance with the timing and distribution requirements of paragraph (b)(6) of this section.'' and replace with ''The applicant must send a notice to all persons on the facility list as set forth in 40 CFR 124.10(c)(1)(ix) and to the appropriate units of state and local government as set forth in 40 CFR 124.10(c)(1)(x) announcing the scheduled commencement and completion dates for the trial burn. This notice must be mailed within a reasonable time period before the scheduled trial burn. An additional notice is required if the trial burn is delayed or rescheduled.''

— delete ''including the anticipated time schedule for agency approval of the plan''

— after ''be conducted.'' add ''The applicant shall not commence the trial burn until after the applicant complies with the notice requirements of this paragraph and the commissioner provides the applicant with a written notice stating that the trial burn may commence.''

(OO) 40 CFR 270.66(d)(3)

— delete the first occurrence of ''Director'' and replace with ''applicant''

— after the first occurrence of ''trial burn'' add ''approved by the commissioner''

— delete ''the Director has issued such notice'' and replace with ''the applicant complies with the notice requirements of this paragraph and the commissioner provides the applicant with a written notice stating that the trial burn may commence''

(PP) 40 CFR 270.66(d)(3)(i)

— after ''mailed'' add ''by the applicant''

— delete ''not'' in the second sentence

— delete ''due to circumstances beyond the control of the facility or the permitting agency'' and replace with ''or rescheduled''

(QQ) 40 CFR 270.66 (g)

— delete ''applicants owning or operating existing boilers or industrial furnaces'' and replace with ''the owner or operator of an existing boiler or industrial furnace''

— delete ''The Director must announce his or her intention to approve of the trial burn in accordance with the timing and distribution requirements of paragraph (d)(3) of this section.'' and replace with ''The applicant must send a notice to all persons on the facility mailing list set forth in 40 CFR 124.10(c)(1)(ix) and to the appropriate units of state and local government as set forth in 40 CFR 124.10 (c)(1)(x) announcing the scheduled commencement and completion dates for the trial burn. This notice must be mailed within a reasonable time period before the scheduled trial burn. An additional notice is required if the trial burn is delayed or rescheduled.''

— delete ''including the anticipated time schedule for agency approval of the plan''

— after ''be conducted.'' add the following: ''The applicant shall not commence the trial burn until after the applicant complies with the notice requirements of this paragraph and the commissioner provides the applicant with a written notice stating that the trial burn may commence.''

(RR) 40 CFR 270.73(a)

-- delete '', except an application for a remedial action plan (RAP) under subpart H of this part,''

-- after ''is made.'' add the following: ''For any facility subject to section 22a-449(c)-105(h) of the Regulations of Connecticut State Agencies, any final administrative disposition may include a determination by the commissioner that no permit is necessary. The commissioner may only make such a determination if he finds that no further remedial action is necessary at the facility and that all other requirements for the termination of interim status have been met. In addition to any other procedural requirements, the procedure for terminating interim status for any such facility shall be as follows. The commissioner shall publish, or cause to be published, a public notice reflecting the commissioner's tentative determination to terminate the facility's interim status. Any such notice shall: (i) be published, at the owner or operator's expense, in a newspaper having a substantial circulation in the affected area; (ii) be provided to the owner or operator of the facility and to all persons on the facility mailing list maintained pursuant to 40 CFR 124.10(c)(1)(ix); and (iii) indicate the basis for the commissioner's determination and that the commissioner will accept public comments on the tentative determination for at least thirty days from the date of publication. After the public comment period the commissioner shall make a final determination. Notice of the commissioner's final determination shall be provided to the owner or operator of the facility, all persons on the facility mailing list maintained pursuant to 40 CFR 124.10(c)(1)(ix), and to all persons who commented on the commissioner's tentative determination.

The commissioner may, when the commissioner deems it appropriate, make an earlier determination that all or a designated portion of the remedial action at a disposal facility is complete, even if such facility does not yet meet all requirements for the termination of interim status. The process for making any such determination shall be the same as that set forth in this subparagraph. Any such determination, however, shall not terminate interim status for any such facility.

(SS) 40 CFR 270.73

— add a new subparagraph (h) as follows: ''If pursuant to 40 CFR 270.73 interim status terminates in a manner other than through the issuance of a permit (e.g. the denial of a permit application) and the owner or operator of the facility has not fully and completely satisfied the requirements of 40 CFR 265, Subpart G, then notwithstanding any provision of 40 CFR 270.73, the owner or operator of the facility shall comply with the provisions of 40 CFR 265, Subparts G and H and all the requirements referenced therein.''

(TT) 40 CFR 124.3(a)

— after ''and 122.1 (NPDES)'' add ''and shall comply with all other requirements, including but not limited to section 22a-6g of the Connecticut General Statutes, concerning the submission of a permit application''

(UU) 40 CFR 124.5(a)

— delete ''and 270.41 or 270.43 (RCRA)'' and replace with ''270.41 and 270.43, and any reason provided for or authorized by law, including but not limited to, section 22a-6m of the Connecticut General Statutes''

(VV) 40 CFR 124.5(c)(3)

— after ''this section'' add '', but do remain subject to all other applicable requirements, including but not limited to section 22a-6h of the Connecticut General Statutes, concerning modification of a permit''

(WW) 40 CFR 124.5(d)(1)

— delete The first sentence in its entirety and replace with the following: ''If the commissioner tentatively decides to terminate a permit for reasons specified in 40 CFR 270.43, he or she shall issue a notice of intent to terminate.''

(XX) 40 CFR 124.6(a)

— delete ''Once an application is complete,'' and replace with ''At least thirty days before approving or denying an application for a permit,''

(YY) 40 CFR 124.6(e)

— delete the entire paragraph and replace with the following: ''All draft permits prepared by the commissioner shall be accompanied by a fact sheet (124.8) and shall be publicly noticed (124.10), including notice of a public informational meeting or opportunity for hearing, and made available for public comment (124.11). The commissioner shall respond to comments as provided for in 40 CFR 124.17.''

(ZZ) 40 CFR 124.8(a)

— delete ''major'' in the first sentence

(AAA) 40 CFR 124.8(b)(4)

— delete ''and appropriate supporting references to the administrative record required by 124.9 (for EPA-issued permits)''

(BBB) 40 CFR 124.10(a)(1)(iii)

— delete the entire paragraph and replace with the following: ''A public informational meeting or hearing has been scheduled.''

(CCC) 40 CFR 124.10(b)(1)

— delete ''For EPA-issued permits, if the Regional Administrator determines under 40 CFR part 6, subpart F that an Environmental Impact Statement (EIS) shall be prepared for an NPDES new source, public notice of the draft permit shall not be given until after a draft EIS is issued.''

(DDD) 40 CFR 124.10(b)(2)

— each reference to the term ''hearing'' shall be replaced by ''informational meeting or hearing''

(EEE) 40 CFR 124.10(d)(1)(v)

— delete ''and 124.12''

— delete ''place of any hearing'' and replace with ''place of any public informational meeting or hearing''

(FFF) 40 CFR 124.10(d)(1)(vi)

— delete ''required by 124.9''

(GGG) 40 CFR 124.10(d)(2)

— in the title, after ''hearings'' add ''or public informational meetings''

— delete ''hearing under § 124.12'' and replace with ''public informational meeting or hearing''

(HHH) 40 CFR 124.10(d)(2)(ii) and (iii)

— delete ''hearing'' and replace with ''informational meeting or hearing''

(III) 40 CFR 124.12(a)

— delete paragraphs (a)(1) to (a)(3), inclusive, and replace with the following: ''(a)(1) The commissioner shall hold a public informational meeting regarding each draft permit prepared pursuant to 40 CFR 124.6, except that no public informational meeting shall be required if the commissioner has decided to hold a hearing regarding a draft permit. The commissioner may hold a public hearing whenever he or she:

(i) finds, on the basis of requests, that there is a significant degree of public interest in the draft permit;

(ii) finds such a hearing might clarify one or more issues involved in the permit decision; or

(iii) receives written notice of opposition to a draft permit.

All requests for a hearing regarding a draft permit shall be submitted within thirty days of the publication of the commissioner's tentative determination, except that requests submitted after this thirty day period, but before the end of the public comment period, may be considered only if the commissioner determines that the person submitting the request has, as part of the request, demonstrated good-cause why the request was not submitted within thirty days of the publication of the commissioner's tentative determination. (2) Whenever possible, the commissioner shall schedule any public informational meeting and at least one day of any hearing held under this section at a location convenient to the nearest population center to the proposed facility.''

— renumber paragraph 124.12(a)(4) as paragraph (a)(3).

(JJJ) 40 CFR 124.13

— delete ''the public comment period (including any public hearing) under 124.10'' and replace with ''the designated public comment period or if a hearing is held, during the course of any such hearing''

— delete ''as directed by the Regional Administrator'' and replace with ''and the public and such supporting materials shall be included in the administrative record''

(KKK) 40 CFR 124.17(a)

— delete ''under 124.15''

— after the first sentence add, ''If the commissioner holds a hearing regarding a draft permit, the response to comments shall be included with the final decision of the commissioner for such hearing.''

— delete ''States are only required to issue a response to comments when a final permit is issued.''

(LLL) 40 CFR 124.17(c)

— after the term ''public'' add ''and any person who provides oral or written comments on the draft permit shall be provided the response to comments if requested by such person''

(MMM) 40 CFR 124.31(a)

— delete the paragraph in its entirety and replace with the following: ''(a) *Applicability*. The requirements of this section apply to all persons who after June 27, 2002 intend to submit an application to the commissioner seeking a hazardous waste permit under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies. The requirements of this section shall also apply to a permittee seeking renewal of a permit or modification to a permit, where such renewal or modification includes a significant change to a permit. For purposes of this section, a ''significant change'' is any change that would qualify as a ''class 3'' permit modification under 40 CFR 270.42. The requirements of this section do not apply to any person who, prior to June 27, 2002, has already submitted an application to the commissioner seeking a hazardous waste permit or renewal or modification to any such permit under section 22a-449a(c)-110 of Regulations of Connecticut State Agencies, even if such permit, renewal or modification has not yet been issued. The requirements of this section also do not apply to a permittee seeking any permit modification that qualifies as a class 1 or class 2 modification under 40 CFR 270.42.''

(NNN) 40 CFR 124.31 (b)

— delete ''Prior to the submission of a part B RCRA permit application for a facility,'' and replace with ''No more than forty-five (45) days before submitting an application seeking a hazardous waste permit under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies,''

— after ''public'' add ''in the municipality or city where the facility is located''

— after ''management activities.'' add ''The applicant shall provide the following information, at a minimum, at such meeting: (1) the name and mailing address of the applicant and the address of the location at which the proposed activity will take place; (2) the type of permit the applicant intends to seek, including a reference to the statute or regulation under which such permit can be issued; (3) a description of the activity for which a permit is sought; (4) a description of the location of the proposed activity and any natural resources affected thereby; and (5) the name and address and telephone number of a person from or representing the applicant from who interested persons may obtain copies of the application or obtain information about the application.''

(OOO) 40 CFR 124.31 (d)

— delete ''permitting agency upon request, documentation of the notice'' and replace with ''commissioner, as part of the part B application documentation that notice has been provided in accordance with 40 CFR 124.31(d)(1) and (2)''

(PPP) 40 CFR 124.31 (d)(1)(i)

— delete ''county or equivalent jurisdiction'' and replace with ''municipality or city''

— after ''notice in'' add ''additional newspapers or''

— delete ''counties or equivalent jurisdictions'' and replace with ''municipalities or cities''

(QQQ) 40 CFR 124.31 (d)(1)(ii)

— delete the second sentence in its entirety and replace with the following: ''The sign shall: (1) be erected at or near the facility property that is the subject of the permit application; (2) not be less than six feet by four feet and be clearly visible from the public highway; and (3) be maintained in legible condition for, at a minimum, the thirty days preceding the public meeting required by 40 CFR 124.31(b).''

(RRR) 40 CFR 124.31 (d)(1)(iii)

— after ''prior'' add ''written''

(SSS) 40 CFR 124.31(d)(1)(iv)

— delete each occurrence of ''permitting agency'' and replace with ''commissioner''

(TTT) 40 CFR 124.32(a)

— delete the paragraph in its entirety and replace with the following: ''(a) *Applicability*. The requirements of this section apply to all persons who after June 27, 2002 submit an application to the commissioner seeking a hazardous waste permit under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies. The requirements of this section shall also apply to a permittee seeking renewal of a permit or modification to a permit, where such renewal or modification includes any significant change to a permit. For purposes of this section, a ''significant change'' is any change that would qualify as a ''class 3'' permit modification under 40 CFR 270.42. The requirements of this section do not apply to any person who, prior to June 27, 2002, has already submitted an application to the commissioner seeking a hazardous waste permit or renewal or modification to any such permit under section 22a-449a(c)-110 of Regulations of Connecticut State Agencies, even if such permit, renewal or modification has not yet been issued. The requirements of this section also do not apply to a permittee seeking any permit modification that qualifies as a class 1 or class 2 modification under 40 CFR 270.42.''

(UUU) 40 CFR 124.32(b)(1)

— delete ''The Director'' and replace with ''In addition to any other applicable requirements regarding notification at application submittal, the applicant''

— delete each occurrence of ''as set forth'' and replace with ''to those set forth''

(VVV) 40 CFR 124.32(b)(2)

— delete ''The notice'' in the second sentence and replace with ''In addition to any other applicable requirements regarding notification at application submittal, the notice provided by the applicant ''

(WWW) 40 CFR 124.32(b)(3)

— delete ''The Director'' and replace with ''the applicant''

(XXX) 40 CFR 124.33(a)

— delete the paragraph in its entirety and replace with the following: ''(a) *Applicability*. The requirements of this section shall apply to all persons seeking: (1) a permit; (2) renewal of a permit; or (3) any type of modification to a permit issued under section 22a-449(c)-110 of the Regulations of Connecticut State Agencies.''

(YYY) 40 CFR 124.33(b)

— after ''permit application'' add '', an application for renewal of a permit or an application for a modification to a permit''

— delete ''notify the facility'' and replace with ''notify the owner or operator of the facility in writing''

(ZZZ) 40 CFR 124.33(d)

— delete ''the facility'' and replace with ''owner or operator of the facility''

— delete ''specify a more appropriate site'' and replace with ''notify the owner or operator of the facility in writing that the information repository shall be located and maintained at a site specified by the commissioner and the owner or operator shall locate and maintain the information repository in accordance with the written notice of the commissioner''

(AAAA) 40 CFR 124.33(e)

— after ''information repository'' in the first sentence add ''and the owner or operator of the facility shall implement the requirements that the commissioner specifies in writing concerning any such information repository''

— delete ''the facility'' and replace with ''the owner or operator of the facility''

— after ''mailing list'' add ''maintained in accordance with 40 CFR 124.10 (c)(1) (ix)''

(BBBB) 40 CFR 124.33 (f)

— after ''specified'' add ''in writing''

(3) For purposes of subdivision (2) of this subsection, a public informational meeting shall not mean or be deemed to constitute a ''contested case'' for purposes of chapter 54 of the Connecticut General Statutes.

(4) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsection (b) of this section shall apply.

(b) **Fees**

(1) The fee for applying for the following modifications to a permit issued under this section shall be as follows:

(A) For modification to a permit listed as a Class I permit modification that does not require the approval of the commissioner - two hundred and fifty dollars ($250.00); and

(B) For modification to a permit listed as a Class I permit modification that requires the approval of the commissioner - five hundred dollars ($500.00).

For purposes of this subdivision, ''Class I'' shall mean permit modifications designated as Class I in Appendix I to 40 CFR 270.42.

(2) The fee for transferring any permit issued under this section shall be the fee established by the commissioner pursuant to section 22a-6o of the Connecticut General Statutes.

(3) An applicant or permittee shall submit all fees required by this subsection by certified check or money order payable to the Department of Environmental Protection. Any fee required by this subsection shall be due upon the submission of the application or request to which it relates. Any application or request shall not be deemed complete and will not be reviewed until all fees required by this section have been paid in full.

(4) All fees required by this subsection may be waived for agencies, boards, commissions, councils and departments of the state of Connecticut as provided in section 22a-6f of the Connecticut General Statutes.

(5) All fees charged to a municipality pursuant to this subsection shall be fifty percent of the fee charged to other applicants.

(6) Other than the fees specified in this subsection, nothing in this subsection shall affect the fees specified in the Connecticut General Statutes.

(7) Any person required to pay more than one fee (i.e., for multiple permits or multiple applications or requests requiring payment of a fee) shall pay the fee calculated by adding each fee associated with each application request or permit requiring payment of a fee. In calculating the total fee, each permit application or request requiring payment of a fee shall be added separately, even if an applicant or requester files one application seeking multiple permits or one request containing multiple requests.

(Effective July 17, 1990; amended October 31, 2001, June 27, 2002, September 10, 2002)

Sec. 22a-449(c)-111. Reserved

Sec. 22a-449(c)-112. Reserved

Sec. 22a-449(c)-113. Standards for universal waste management

(a) **Incorporation by Reference**

(1) 40 CFR 273 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provision of this subdivision

which is not incorporated: 40 CFR 273.32(a)(3) (regarding an exemption from notification requirements for large quantity handlers of recalled universal waste pesticides)

(2) 40 CFR 273 is incorporated by reference in its entirety except for the provisions of this subdivision which are incorporated by reference with the specified changes:

(A) 40 CFR 273.1(a)(3)

— delete ''and''

(B) 40 CFR 273.1(a)(4)

— delete the period and replace with ''; and''

— add a new paragraph (5) as follows: ''(5) Used electronics as described in section 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies.''

(C) 40 CFR 273.1(b)

— at the end of the paragraph add the following: ''Universal wastes that are not managed in compliance with the requirements of section 22a-449(c)-113 of the Regulations of Connecticut State Agencies shall be managed in compliance with sections 22a-449(c)-100 to 110, inclusive, of the Regulations of Connecticut State Agencies.''

(D) 40 CFR 273.8(b)

— delete ''the wastes'' and replace with ''the waste''

— delete ''(a)(1) and (a)(2)'' and replace with ''(a)(1) or (a)(2)''

(E) 40 CFR 273.9

— add the following introductory sentence: ''For purposes of 40 CFR 273, the terms below shall be defined as follows:

— in the definition of ''Battery'', after ''An electrochemical cell is a'' insert ''self-contained''

— in the definition of ''lamp'', delete ''is defined as'' and replace with ''means'' and in the third sentence delete ''common''

— in the definition of ''Large Quantity Handler of Universal Waste'', delete ''or lamps'' and replace with ''lamps, or used electronics''

— in the definition of ''Pesticide'', delete ''FFDCA section 201(w)'' and replace with ''21 USC 321(v), section 201(w) of the Federal Food, Drug, and Cosmetic Act''; and delete ''FFDCA section 201(x)'' and replace with ''21 USC 321(w), section 201(x) of the Federal Food, Drug, and Cosmetic Act ''

— in the definition of ''Small Quantity Handler of Universal Waste'' delete ''or lamps'' and replace with ''lamps, or used electronics''

— in the definition of ''Universal Waste'', after ''273.4'' delete ''and'', and after ''273.5'' delete the period and replace with ''; and (e) used electronics as described in subsection (b) of this section''

— in the definition of ''Destination Facility'' add the following after the last sentence: ''for purposes of 22a-449(c)-113(b) of the Regulations of Connecticut State Agencies, a facility that engages in the disassembly or demanufacturing of used electronics: (1) For the purpose of marketing, reselling, reusing or recycling the components of a used electronic device; (2) Without treating the device or any component thereof; and (3) Without breaking the cathode ray tube, if any, in any such device, shall not be considered a destination facility. A facility that shreds, crushes, heats, or otherwise treats a used electronic device or any component thereof, or that breaks the cathode ray tube in any used electronic device, shall be considered a destination facility.''

— add a new definition of ''used electronics'' as follows: ''used electronics'' or ''a used electronic device'' means a device or component thereof that contains one

or more circuit boards or a cathode ray tube and is used primarily for communication, data transfer or storage, or entertainment purposes, including but not limited to, desk top and lap top computers, computer peripherals, monitors, copying machines, scanners, printers, radios, televisions, camcorders, video cassette recorders (''VCRS''), compact disc players, digitial video disc players, MP3 players, telephones, including cellular and portable telephones, and stereos.''

(F) 40 CFR 273.13(c)(1)

— delete ''contain'' and replace with ''place and keep''

— delete ''that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions''

— delete ''lack of evidence of'' and replace with ''be capable of preventing''

— delete the second occurrence of ''under reasonably forseeable conditions''

(G) 40 CFR 273.13(d)(1)

— delete ''lack of evidence'' and replace with ''be capable of preventing''

— delete ''under reasonably forseeable conditions''

(H) 40 CFR 273.13(d)(2)

— delete ''that could cause the release of mercury or other hazardous constituents to the environment''

— delete ''lack of evidence'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(I) 40 CFR 273.14(d)

— delete ''Universal waste thermostats (i.e., each thermostat), or a'' and replace with ''Each''

(J) 40 CFR 273.15(c)(2)

— after ''battery'' add '', lamp''

(K) 40 CFR 273.17(b)

— Add to the beginning of the first sentence ''Other than inadvertent breakage of small quantities of universal waste, including inadvertent breakage of small quantities during transportation, which must be handled as a universal waste,''

(L) 40 CFR 273.18(c)

— delete '';'' and replace with ''.''

(M) 40 CFR 273.18(h)

— delete ''may'' and replace with ''shall''

— delete ''any way that is in''

(N) 40 CFR 273.32(a)(1)

— delete ''paragraphs (a)(2) and (3)'' and replace with ''paragraph (a)(2)''

(O) 40 CFR 273.32(b)(4)

— after ''lamps'' add '', and used electronics''

(P) 40 CFR 273.32(b)(5)

— delete ''(e.g., batteries, pesticides, thermostats, and lamps)''

(Q) 40 CFR 273.33(c)(1)

— delete delete ''contain'' and replace with ''place and keep''

— delete ''that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions''

— delete ''lack evidence of'' and replace with ''be capable of preventing''

— delete the second occurrence of ''under reasonably forseeable conditions''

(R) 40 CFR 273.33(d)(1)

— delete ''lack evidence of'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(S) 40 CFR 273.33(d)(2)

— delete ''that could cause the release of mercury or other hazardous constituents to the environment''

— delete ''lack evidence of'' and replace with ''be capable of preventing''

— delete ''under reasonably foreseeable conditions''

(T) 40 CFR 273.34(d)

— delete ''Universal waste thermostats (i.e., each thermostat), or a'' and replace with ''Each''

(U) 40 CFR 273.35(c)(2)

— after ''battery'' add '', lamp,''

(V) 40 CFR 273.37(b)

— Add to the beginning of the first sentence ''Other than inadvertent breakage of small quantities of universal waste, including inadvertent breakage of small quantities during transportation, which must be handled as a universal waste,''

(W) 40 CFR 273.38(c)

— delete '';'' and replace with ''.''

(X) 40 CFR 273.38(h)

— delete ''may'' and replace with ''shall''

— delete ''any way that it is in''

(Y) 40 CFR 273.39(a)(2)

— after ''thermostats'' add '', lamps, used electronics''

(Z) 40 CFR 273.39(b)(2)

— after ''thermostats'' add '', lamps, used electronics''

(AA) 40 CFR 273.60(a)

— after ''3010 of RCRA'' add the following: ''and all applicable provisions of the Connecticut General Statutes, including but not limited to, section 22a-209e of the Connecticut General Statutes,''

(BB) 40 CFR 273.61(d)

— delete ''may'' and replace with ''shall''

— delete ''any way that it is in''

(CC) 40 CFR 273.62(a)(2)

— after ''thermostats'' add '', lamps, used electronics''

(DD) 40 CFR 273.80(a)

— delete ''and 40 CFR 260.20 and 260.23'' and replace with ''. In addition, the commissioner may on his own, initiate rulemaking in accordance with chapter 54 of the Connecticut General Statutes, to add a hazardous waste or category of hazardous waste to the wastes regulated as a universal waste under section 22a-449(c)-113 of the Regulations of Connecticut State Agencies.''

(EE) 40 CFR 273.80(b)

— after ''40 CFR 260.20(b)'' add ''and section 22a-3a-3(c) of the Regulations of Connecticut State Agencies. The petitioner shall provide any additional information the commissioner deems necessary to evaluate the petition.''

(FF) 40 CFR 273.80(c)

— after ''grant or deny a petition'' add '', as provided for in section 4-174 of the Connecticut General Statutes,''

(3) In addition to the provisions incorporated by reference in subdivision (1) of this subsection, the provisions in subsection (b) to (f), inclusive, of this section shall apply.

(b) **Applicability—used electronics.**

(1) Used electronics subject to regulation. The requirements of this section shall apply to persons managing those used electronics as described in subdivision (4) of this subsection, except used electronics listed in subdivision (2) of this subsection.

(2) The requirements of section 22a-449(c)-113 of the Regulations of Connecticut State Agencies do not apply to persons managing the following used electronics:

(A) Used electronics that are not yet wastes under 40 CFR 261. Subdivision (4) of this subsection describes when a used electronic device becomes a waste.

(B) Used electronics that are not hazardous waste. A used electronic device is a hazardous waste if it exhibits one or more of the characteristics identified in 40 CFR 261, Subpart C.

(3) Generation of waste used electronics.

(A) A used electronic device becomes a waste on the date it is discarded.

(B) An electronic device of a type described in the definition of used electronics that has not been used becomes a waste on the date the handler decides to discard it.

(4) The requirements of section 22a-449(c)-113 of the Regulations of Connecticut State Agencies apply to persons managing used electronics that have become a waste and that exhibit one or more of the characteristics identified in 40 CFR 261, subpart C.

(c) **Used Electronics – Standards for Small Quantity Handlers.**

(1) A small quantity handler of used electronics shall comply with the applicable provisions of 40 CFR 273, subparts B and F. In addition, a small quantity handler of used electronics shall:

(A) manage used electronics in a way that prevents the release of any universal waste, component of a universal waste, or constituent of a universal waste to the environment;

(B) store all used electronics inside a building with a roof and four walls or in the cargo-carrying portion of a truck, such as in a trailer, in a manner that prevents used electronics from being exposed to the environment and shall ensure that all used electronics are handled, stored and transported in a manner that maintains the reuse or recyclability of any such used electronic or component thereof;

(C) immediately clean up and place in a container any broken cathode ray tube(s) from a used electronic device and shall place all such waste in a container. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube(s) and shall be capable of preventing leakage, spillage or releases of broken cathode ray tubes, glass particles or other hazardous constituents from such broken tubes to the environment;

(D) not shred, crush, heat or otherwise treat used electronics or any component thereof and shall not break the cathode ray tube in any used electronic device. Provided no treatment is occurring, a small quantity handler of used electronics may disassemble used electronics for the sole purpose of marketing, reselling, reusing, or recycling components thereof; and

(E) clearly label or mark each used electronic device or container, package or pallet containing used electronics, with one of the following phrases: ‘‘universal waste – used electronics’’, or ‘‘waste used electronics’’, or ‘‘used electronics.’’

(d) **Used Electronics – Standards for Large Quantity Handlers.**

(1) A large quantity handler of used electronics shall comply with the applicable provisions of 40 CFR 273, subparts C and F. In addition, a large quantity handler of used electronics shall:

(A) manage used electronics in a way that prevents the release of any universal waste, component of a universal waste, or constituent of a universal waste to the environment;

(B) store all used electronics inside a building with a roof and four walls or in the cargo-carrying portion of a truck, such as in a trailer, in a manner that prevents

used electronics from being exposed to the environment and shall ensure that all used electronics are handled, stored and transported in a manner that maintains the reuse or recyclability of any such used electronic or component thereof;

(C) immediately clean up and place in a container any broken cathode ray tube(s) from a used electronic and shall place all such waste in a container. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube(s) and shall be capable of preventing leakage, spillage or releases of broken cathode ray tubes, glass particles or other hazardous constituents from such broken tubes to the environment;

(D) not shred, crush, heat or otherwise treat used electronics or any component thereof and shall not break the cathode ray tube in any used electronic device. In addition, a large quantity handler shall not disassemble used electronics without first obtaining a permit issued by the commissioner; and

(E) clearly label or mark each used electronic device or container, package or pallet containing used electronics, with one of the following phrases: ''universal waste – used electronics'', or ''waste used electronics'', or ''used electronics.''

(e) **Used Electronics – Standards for Transporters.**

A universal waste transporter of used electronics shall comply with 40 CFR 273, subparts D and F.

(f) **Used Electronics – Standards for Destination Facilities.**

The owner or operator of a destination facility that treats, disposes of or recycles used electronics, except for those management activities described in 40 CFR 273.13(a) and (c) and 40 CFR 273.33(a) and (c), shall comply with 40 CFR 273, subparts E and F.

(Adopted effective October 31, 2001; amended June 27, 2002)

Sec. 22a-449(c)-114. Reserved

Sec. 22a-449(c)-115. Reserved

Sec. 22a-449(c)-116. Reserved

Sec. 22a-449(c)-117. Reserved

Sec. 22a-449(c)-118. Reserved

Sec. 22a-449(c)-119. Standards for the management of used oil

(a) **Incorporation by Reference**

(1) 40 CFR 279 is incorporated by reference in its entirety except as provided in subdivision (2) of this subsection and except for the provisions of this subdivision which are not incorporated:

(A) 40 CFR 279.10(b)(3) (which relates to mixtures of used oil and hazardous waste from conditionally exempt small quantity generators); and

(B) 40 CFR 279.82(b) and (c) (which relates to used oil as a dust suppressant).

(2) The provisions of this subdivision are incorporated by reference with the specified changes:

(A) 40 CFR 279.1

— in the introductory sentence delete ''260.10''

— in the definition of ''Existing tank'' delete ''the authorized used oil program for the state in which the tank is located'' and replace with ''this section''

— in the definition of ''New tank'' delete ''the authorized used oil program for the state in which the tank is located'' and replace with ''this section''

— after the definition of ''New tank'' add two new definitions as follows:

''Off-Specification'' or ''Off-Specification Used Oil'' means used oil that has not been tested, has not been tested in accordance with the required test methods or for all of the required parameters, has been designated as off-specification, or, based upon analysis performed in accordance with the required test methods, exceeds any one or more of the allowable levels of the constituents or properties listed in Table 1 of 40 CFR 279.11. References to ''used oil not meeting the specification requirements of 279.11'', or similar references, shall be deemed to mean off-specification used oil as defined in this definition.''

''On-Specification'' or ''On-Specification Used Oil'' means used oil burned for energy recovery, and any fuel produced from used oil by processing, blending, or other treatment, that, based upon analysis performed in accordance with the required test methods and for all of the required parameters, exceeds none of the allowable levels for the constituents and properties listed in Table 1 of 40 CFR 279.11. References to ''used oil that meets the used oil fuel specification of 279.11'', or similar references, shall be deemed to mean on-specification used oil as defined in this definition.''

— delete the definition of ''Used Oil'' and replace with the following: ''Used oil'' means any oil refined from crude oil or synthetic oil, that: (A) has been used and as a result of such use is contaminated by physical or chemical impurities; or (B) is no longer suitable for the services for which it was manufactured due to the presence of impurities or a loss of original properties.''

— after the definition of ''Used Oil Aggregation Point'' add a new definition as follows: ''Used Oil Burned For Energy Recovery'' or ''Used Oil Fuel'' means used oil with heating value of more than 5,000 Btu/lb.

— in the definition of ''Used Oil Burner'' after ''means'' add ''a person who owns or operates''

— in the definition of ''Used oil collection center'' delete ''that is registered/licensed/permitted/recognized by a state/county/municipal government'' and replace with ''for which the owner or operator has a valid and effective permit issued by the commissioner authorizing such owner or operator''

— in the definition of ''Used oil transfer facility'' delete both references to ''35'' and replace them with ''10''

(B) 40 CFR 279.10(b)(1)(ii)

— delete ''Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).'' and replace with ''To rebut the presumption that the used oil has been mixed with the hazardous waste designated in 40 CFR 261.31(a) as F001 or F002, a person shall demonstrate by analysis or other means that none of the following halogenated hazardous waste constituents are present in the used oil at greater than 100 parts per million: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane. To rebut the presumption that the used oil has been mixed with any other hazardous waste listed in 40 CFR 261, Subpart D, (i.e., hazardous wastes other than F001 and F002) a person shall demonstrate by analysis or other means that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous

constituents listed in Appendix VIII of 40 CFR 261). Unless and until such person has rebutted the presumption, a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such.''

(C) 40 CFR 279.10(b)(2)

— delete ''Characteristic hazardous waste. Mixtures of used oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristic identified in subpart C of part 261 of this chapter and mixtures of used oil and hazardous waste that is listed in subpart D solely because it exhibits one or more of the characteristics of hazardous waste identified in subpart C are subject to:'' and replace with the following: ''Characteristic hazardous waste. This paragraph applies to any mixture of used oil and: a) a waste that is hazardous solely because it exhibits one or more of the hazardous waste characteristics identified in 40 CFR 261, Subpart C; or b) a hazardous waste that is listed in 40 CFR 261, Subpart D solely because it exhibits one or more of the characteristics of hazardous waste identified in 40 CFR 261, Subpart C. Any such mixture shall, based upon testing the mixture according to the methods set forth in 40 CFR 261.24 or based upon knowledge of the characteristics of the mixture in light of the materials or processes used, be subject to:''

(D) 40 CFR 279.10(b)(2)(ii)

— after ''chapter'' add ''provided, no person shall mix a used oil and a hazardous waste that exhibits one or more of the characteristics of a hazardous waste identified in 40 CFR 261, Subpart C for any purpose other than facilitating the recycling of such hazardous waste in a manner provided for in 40 CFR 279.''

(E) 40 CFR 279.10(c)(1)(ii)

— delete paragraph 279.10(c)(1)(ii) and replace with the following: ''(ii) Are subject to all applicable provisions of the Connecticut General Statutes and regulations promulgated thereunder, including but not limited to, section 22a-449(c)-100 to 110, inclusive, of the Regulations of Connecticut State Agencies and if the materials are not hazardous wastes, section 22a-209-1 to 18, inclusive, of the Regulations of Connecticut State Agencies.''

(F) 40 CFR 279.10(i)

— delete ''who market'' and replace with ''who market or burn''

(G) 40 CFR 279.11

— after ''unless it is shown'' add ''through analytical testing''

— after ''Table 1.'' add ''A person determining whether used oil exceeds any allowable level of constituents and properties listed in Table 1 shall do so using: (i) the test methods specified below; or (ii) an alternative method(s) provided that, before use, such alternative method has been approved by the commissioner in writing:

Arsenic – EPA Methods 7060A, 7061A, 7062, 6010B or 6020

Cadmium – EPA Methods 7130, 7131A, 6010B, or 6020

Chromium – EPA Methods 7190, 7191, 6010B, or 6020

Lead – EPA Methods 7420, 7421, 6010B, or 6020

Flash Point – EPA Methods 1010 or 1020A

Total Halogens – EPA Methods 9075, 9076, 9077, 5050 coupled with either 9056 or 9253, or American Society for Testing and Materials (''ASTM'') Method D808-95.

For purposes of this subparagraph, all references to EPA Methods shall mean the test method as described in EPA Publication SW-846, ''Test Methods for Evaluating Solid Waste—Physical/Chemical Methods, Edition III.''

(H) 40 CFR 279.12(b)

— delete ‘‘, except when such activity takes place in one of the states listed in 279.82(c)’’

(I) 40 CFR 279.12(c)(2)(iii)

— delete ‘‘the burner’’ and replace with ‘‘the heater’’

(J) 40 CFR 279.12

— add a new paragraph (d) as follows: ‘‘(d) No person shall burn used oil in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with any such building (e.g., an outbuilding or garage). In addition, no person shall sell, offer for sale or make available, used oil for burning in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with a residential building (e.g., an outbuilding or garage).’’

(K) 40 CFR 279.20(b)

— delete ‘‘are subject to’’ and replace with ‘‘are also subject to’’

(L) 40 CFR 279.21(b)

— after ‘‘refrigeration units.’’ add the following sentence: ‘‘Unless and until such person has rebutted the presumption, a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such.’’

(M) 40 CFR 279.22 introductory paragraph

— delete ‘‘(40 CFR part 280) standards’’ and replace with ‘‘requirements set forth in sections 22a-449(d)-1 and 22a-449(d)-101 to 113, inclusive, of the Regulations of Connecticut State Agencies’’

(N) 40 CFR 279.22(d)

— delete ‘‘part 280, subpart F of this chapter and which has occurred after the effective date of the recycled used oil management program in effect in the State in which the release is located’’ and replace with ‘‘section 22a-449(d)-1(j) or section 22a-449(d)-106 of the Regulations of Connecticut State Agencies’’

(O) 40 CFR 279.22(d)(3)

— after ‘‘other materials’’ add ‘‘, including remediation of any part of the environment affected by the release’’

(P) 40 CFR 279.23

— at the end of paragraph (b) delete ‘‘and’’

— at the end of paragraph (c) delete the period and replace with ‘‘; and’’

— after paragraph (c), add a new paragraph (d) as follows: ‘‘(d) The used oil has a heating value of more than 5,000 Btu/lb.’’

(Q) 40 CFR 279.24(a)(3)

— delete ‘‘is registered, licensed, permitted, recognized by a state/county/municipal government’’ and replace with ‘‘has a valid and effective permit issued by the commissioner authorizing the owner or operator of the used oil collection center’’

(R) 40 CFR 279.31(b)(2)

— delete ‘‘Be registered, licensed, permitted, recognized by a state/county/municipal government’’ and replace with ‘‘Have a valid and effective permit issued by the commissioner authorizing such owner or operator ’’

(S) 40 CFR 279.40(c)

— on each appearance of the word, replace ‘‘trucks’’ with ‘‘transport vehicles, as defined in 49 CFR 171.8,’’

(T) 40 CFR 279.40(d)

— delete ‘‘subject to’’ and replace with ‘‘subject to the requirements of’’

(U) 40 CFR 279.42(a)

— insert the following before the first full sentence: ''Except as is provided for in 40 CFR 279.40(a)(1) to (a)(4), inclusive, a used oil transporter shall not transport used oil without having first obtained an EPA identification number.''

(V) 40 CFR 279.43(c)(2)

— delete ''an official (State or local government or a Federal Agency)'' and replace with ''the commissioner or an official of a federal agency''

— delete ''EPA identification numbers'' and add ''either an EPA identification number, a DEP transporter permit or both''

— at the end of the paragraph add ''Except as provided for in this paragraph, the used oil must be managed and disposed of in accordance with the state hazardous waste management regulations.''

(W) 40 CFR 279.43(c)(3)(i)

— after the telephone number for the National Response Center add ''and give notice to the commissioner, using the 24-hour Emergency Spill Response telephone number at (860) 424-3338 or, if that number is unavailable, at (860) 424-3333. In addition to this oral notification, the transporter shall comply with all applicable reporting and notification requirements regarding the release, including but not limited to, reporting in accordance with section 22a-450 of the Connecticut General Statutes.''

(X) 40 CFR 279.43(c)(5)

— delete ''discharged'' and replace with ''discharge''

— after ''local officials'' add ''(to the extent that actions required or approved by local officials are consistent with those required or approved by federal or state officials)''

(Y) 40 CFR 279.44(a)

— in the phrase ''used oil being transporter'' change ''transporter'' to ''transported''

— delete ''above or below'' and replace with ''less than, greater than or equal to''

(Z) 40 CFR 279.44(b)(1)

— delete the entire paragraph and replace with the following: ''(b)(1) Testing a representative sample of the used oil using any one of the following test methods: (i) EPA Method 9075, 9076 or 9077; (ii) EPA Method 5050, coupled with either EPA Method 9056 or 9253; (iii) American Society for Testing and Materials (''ASTM'') Method D808-95; or (iv) an alternative method(s) which before use has been approved by the commissioner in writing. For purposes of this subparagraph, all references to EPA Methods shall mean the test method as described in EPA Publication SW-846, ''Test Methods for Evaluating Solid Waste—Physical/Chemical Methods, Edition III; or''

(AA) 40 CFR 279.44(b)(2)

— after ''processes used'' add '', provided that the transporter retains documentation demonstrating whether each used oil accepted by such transporter contains greater than, less than or equal to 1,000 parts per million total halogens''

(BB) 40 CFR 279.44(c)

— delete ''greater than or equal to'' and replace with ''more than''

— delete ''The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).'' and replace with ''To rebut the presump-

tion that the used oil has been mixed with the hazardous waste designated in 40 CFR 261.31(a) as F001 or F002, a transporter shall demonstrate by analysis or other means that none of the following halogenated hazardous waste constituents are present in the used oil at greater than 100 parts per million: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane. To rebut the presumption that the used oil has been mixed with any other hazardous waste listed in 40 CFR 261, Subpart D, (i.e., hazardous wastes other than F001 and F002) a transporter shall demonstrate by analysis or other means that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of 40 CFR 261). Unless and until such transporter has rebutted the presumption, a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such.''

(CC) 40 CFR 279.45 introductory paragraph

— delete ''(40 CFR part 280) standards'' and replace with ''requirements set forth in sections 22a-449(d)-1 and 22a-449(d)-101 to 113, inclusive, of the Regulations of Connecticut State Agencies''

(DD) 40 CFR 279.45(a)

— delete both references to ''35'' and replace with ''10''

— delete ''subpart F of this chapter'' and replace with ''40 CFR 279, subpart F''

(EE) 40 CFR 279.45(h)

— delete ''part 280, subpart F of this chapter and which has occurred after the effective date of the recycled used oil management program in effect in the State in which the release is located'' and replace with ''section 22a-449(d)-1(j) or section 22a-449(d)-106 of the Regulations of Connecticut State Agencies''

(FF) 40 CFR 279.45(h)(3)

— after ''other materials'' add '', including remediation of any part of the environment affected by the release''

(GG) 40 CFR 279.51(a)

— insert the following before the first full sentence: ''Except as is provided for in 40 CFR 279.50(a)(1) and (a)(2), the owner or operator of a facility that processes used oil shall not process used oil without having first obtained an EPA identification number.''

(HH) 40 CFR 279.52(a)

— delete ''Owners and operators of used oil processors and re-refiners facilities'' and replace with ''Owners or operators of facilities processing or re-refining used oil''

(II) 40 CFR 279.52(a)(3)

— at the end of the paragraph add ''Such systems and equipment shall be tested and maintained as necessary to assure its proper operation in time of an emergency at least once every calendar month and after each use.''

(JJ) 40 CFR 279.52(b)

— delete ''Owners and operators of used oil processors and re-refiners facilities'' and replace with ''Owners or operators of facilities processing or re-refining used oil''

(KK) 40 CFR 279.52(b)(1)(ii)

— replace ''or release or'' with ''or release of''

(LL) 40 CFR 279.52(b)(6)(ii)

— delete ''analysts'' and replace with ''analysis''

(MM) 40 CFR 279.52(b)(6)(iv)(B)

— after the telephone number for the National Response Center add ''and give notice to the commissioner, using the 24-hour Emergency Spill Response telephone number at (860) 424-3338 or, if that number is unavailable, at (860) 424-3333. In addition to this oral notification, the transporter shall comply with all applicable reporting and notification requirements regarding the release, including, but not limited to, reporting in accordance with section 22a-450 of the Connecticut General Statutes.''

(NN) 40 CFR 279.52(b)(6)(v)

— delete ''operation'' and replace with ''operations''

(OO) 40 CFR 279.53(a)

— delete ''above or below'' and replace with ''less than, greater than or equal to''

(PP) 40 CFR 279.53(b)(1)

— delete the entire paragraph and replace with the following: ''(b)(1) Testing a representative sample of the used oil using any one of the following test methods: (i) EPA Method 9075, 9076 or 9077; (ii) EPA Method 5050, coupled with either EPA Method 9056 or 9253; (iii) American Society for Testing and Materials (''ASTM'') Method D808-95; or (iv) an alternative method(s) which before use has been approved by the commissioner in writing. For purposes of this subparagraph, all references to EPA Methods shall mean the test method as described in EPA Publication SW-846, ''Test Methods for Evaluating Solid Waste—Physical/Chemical Methods, Edition III; or''

(QQ) 40 CFR 279.53(b)(2)

— at the end of the sentence add '', provided that the owner or operator retains documentation demonstrating whether each shipment of used oil accepted by such owner or operator and each used oil generated by such owner or operator contains greater than, less than or equal to 1,000 parts per million total halogens''

(RR) 40 CFR 279.53(c)

— delete ''greater than or equal to'' and replace with ''more than''

— delete ''The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).'' and replace with ''To rebut the presumption that the used oil has been mixed with the hazardous waste designated in 40 CFR 261.31(a) as F001 or F002, the owner or operator shall demonstrate by analysis or other means that none of the following halogenated hazardous waste constituents are present in the used oil at greater than 100 parts per million: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane. To rebut the presumption that the used oil has been mixed with any other hazardous waste listed in 40 CFR 261, Subpart D, (i.e., hazardous wastes other than F001 and F002) the owner or operator shall demonstrate by analysis or other means that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of 40 CFR 261). Unless and until such owner or operator has rebutted the presumption,

a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such.''

(SS) 40 CFR 279.53

— add a new paragraph (d) as follows: ''Record Retention. Records of analysis conducted or information used to comply with paragraphs (a), (b) and (c) of this section shall be maintained by the owner or operator for at least three years from the date such records are created.''

(TT) 40 CFR 279.54 introductory paragraph

— delete ''(40 CFR part 280) standards'' and replace with ''requirements set forth in sections 22a-449(d)-1 and 22a-449(d)-101 to 113, inclusive, of the Regulations of Connecticut State Agencies)''

(UU) 40 CFR 279.54(g)

— delete ''part 280, subpart F of this chapter and which has occurred after the effective date of the recycled used oil management program in effect in the State in which the release is located'' and replace with ''section 22a-449(d)-1(j) or section 22a-449(d)-106 of the Regulations of Connecticut State Agencies''

(VV) 40 CFR 279.54(g)(3)

— after ''other materials'' add '', including remediation of any part of the environment affected by the release''

(WW) 40 CFR 279.54(h)(1)(i)

— after ''containment system components,'' add ''contaminated surface waters, contaminated groundwaters,''

(XX) 40 CFR 279.54(h)(2)(ii)

— after the term ''containment system components'' add ''contaminated surface waters, contaminated groundwaters,''

(YY) 40 CFR 279.55 introductory paragraph

— delete ''Owners or operators of used oil processing and re-refining facilities'' and replace with ''Owners or operators of facilities processing or re-refining used oil''

(ZZ) 40 CFR 279.55(b)

— delete paragraphs (b)(1), (2) and (3), and replace with the following:

''(1) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

(i) One of the sampling methods in Appendix I of 40 CFR 261; or

(ii) A method shown to be equivalent under 40 CFR 260.21;

(2) Whether used oil will be sampled and analyzed prior to or after any processing/re-refining;

(3) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and

(4) The methods used to analyze used oil for the constituents and properties specified in 40 CFR 279.11.''

(AAA) 40 CFR 279.57(a)(2)

— delete ''closure of the facility'' and replace with ''the owner or operator has completed closure of all units used for management of used oil at the facility in accordance with the closure requirements of 40 CFR 279.54 and subsection (d) of this section.''

— in 40 CFR 279.57(a)(2)(i), delete ''and'' after ''279.55;''

— in 40 CFR 279.57(a)(2)(ii), delete ''an specified in § 279.52(b).'' and replace with ''as specified in 40 CFR 279.52(b); and''

— add paragraph (a)(2)(iii) as follows: ''(iii) Any other information required to be in the operating record (e.g., 40 CFR 279.52(a)(6)(D)(ii)).''

(BBB) 40 CFR 279.57(b)

— after ''Regional Administrator'' add ''on such forms as may be prescribed by the commissioner, or in the absence of such forms''

— in 279.57(b)(2) delete ''and''

— in 279.57(b)(3) delete the period and replace with ''; and''

— add paragraph (b)(4) as follows: ''(4) Any other information which the commissioner specifies shall be in such letter/report. The commissioner shall specify such information in writing before such letter/report must be submitted.''

(CCC) 40 CFR 279.59

— delete ''re-fining'' and replace with ''re-refining''

(DDD) 40 CFR 279.60(a)

— after ''A used oil burner is'' add ''a person who owns or operates''

(EEE) 40 CFR 279.61(a)(2)(iii)

— delete ''the burner'' and replace with ''the heater''

(FFF) 40 CFR 279.61

— add a new paragraph (c) as follows: ''(c) No person shall burn used oil in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with any such building (e.g., an outbuilding or garage). In addition, no person shall sell, offer for sale or make available, used oil for burning in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with a residential building (e.g., an outbuilding or garage).''

(GGG) 40 CFR 279.63(a)

— delete ''above or below'' and replace with ''less than, greater than or equal to''

(HHH) 40 CFR 279.63(b)

— delete ''above or below'' and replace with ''less than, greater than or equal to''

(III) 40 CFR 279.63(b)(1)

— delete the entire paragraph and replace with the following: ''(b)(1) Testing a representative sample of the used oil using any one of the following test methods: (i) EPA Method 9075, 9076 or 9077; (ii) EPA Method 5050, coupled with either EPA Method 9056 or 9253; (iii) American Society for Testing and Materials (''ASTM'') Method D808-95; or (iv) an alternative method(s) which, before use, has been approved by the commissioner in writing. For purposes of the subparagraph, all references to EPA Methods shall mean the test method as described in EPA Publication SW-846, ''Test Methods for Evaluating Solid Waste—Physical/Chemical Methods, Edition III;''

(JJJ) 40 CFR 279.63(b)(2)

— after ''processes used'' add '', provided that the used oil burner retains documentation demonstrating whether each used oil accepted by such burner and each used oil generated by such burner contains less than, greater than or equal to 1,000 parts per million total halogens''

(KKK) 40 CFR 279.63(c)

— delete ''greater than or equal to'' and replace with ''more than''

— delete ''The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).'' and replace with ''To rebut the presump-

tion that the used oil has been mixed with the hazardous waste designated in 40 CFR 261.31(a) as F001 or F002, the owner or operator shall demonstrate by analysis or other means that none of the following halogenated hazardous waste constituents are present in the used oil at greater than 100 parts per million: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane. To rebut the presumption that the used oil has been mixed with any other hazardous waste listed in 40 CFR 261, Subpart D, (i.e., hazardous wastes other than F001 and F002) the owner or operator shall demonstrate by analysis or other means that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of 40 CFR 261). Unless and until such owner or operator has rebutted the presumption, a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such.''

(LLL) 40 CFR 279.63(c)(2)

— delete ''are destined for reclamation'' and replace with ''have first been reclaimed''

(MMM) 40 CFR 279.64 introductory paragraph

— delete ''(40 CFR part 280) standards'' and replace with ''requirements set forth in sections 22a-449(d)-1 and 22a-449(d)-101 to 113, inclusive, of the Regulations of Connecticut State Agencies''

(NNN) 40 CFR 279.64(e)

— delete ''*Secondary containment for existing aboveground tanks*.'' and replace with ''*Secondary containment for new aboveground tanks.*''

(OOO) 40 CFR 279.64(g)

— delete ''part 280, subpart F of this chapter and which has occurred after the effective date of the recycled used oil management program in effect in the State in which the release is located'' and replace with ''section 22a-449(d)-1(j) or section 22a-449(d)-106 of the Regulations of Connecticut State Agencies''

(PPP) 40 CFR 279.64(g)(3)

— after ''other materials'' add '', including remediation of any part of the environment affected by the release''

(QQQ) 40 CFR 279.66(b)

— replace ''The certification'' with ''A copy of the certification''

— after ''maintained'' add ''by such burner''

(RRR) 40 CFR 279.70(a)

— delete ''Any person who conducts either of the following activities is subject to the requirements of this subpart:'' and replace with ''Except as provided in paragraph (b) of this section, any person who conducts either of the following activities is a marketer and is subject to the requirements of this subpart:''

(SSS) 40 CFR 279.70(b)(1)

— delete the first sentence and replace with the following: ''Used oil generators, and transporters who transport used oil received only from generators, unless the generator or transporter: (1) directs a shipment of off-specification used oil from their facility to a used oil burner; or (2) is the first to claim that used oil that is to be burned for energy recovery is on-specification used oil.''

(TTT) 40 CFR 279.71

— at the beginning of this section add a new paragraph as follows: ''A marketer shall not sell, offer for sale or make available, used oil for burning in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with a residential building (e.g., an outbuilding or garage).''

(UUU) 40 CFR 279.72(a)

— delete all that follows after ''§ 279.11'' and replace with the following: ''. Any such person shall make this determination by performing analyses or obtaining copies of analyses of such used oil.''

(VVV) 40 CFR 279.72(b)

— delete ''(or other information used to make the determination)''

(WWW) 40 CFR 279.74(b)(4)

— delete ''or other information''

(XXX) 40 CFR 279.75(b)

— after ''maintained'' add ''by the recipient''

(YYY) 40 CFR 279.81

— delete paragraphs (a) and (b) and replace with the following: ''(a) Used oil that is not or cannot be recycled as provided for in this part remains subject to all applicable provisions of the Connecticut General Statutes and regulations promulgated thereunder, including but not limited to section 22a-454 of the Connecticut General Statues and sections 22a-449(c)-100 to 110, inclusive, of the Regulations of Connecticut State Agencies and if the used oil is not a hazardous waste, section 22a-209-1 to 16, inclusive, of the Regulations of Connecticut State Agencies. In addition, no person shall: (1) burn used oil in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with any such building (e.g., an outbuilding or garage); or (2) sell, offer for sale or make available, used oil for burning in a boiler, heater or similar device used to heat, in whole or in part, a residential building or structure associated with a residential building (e.g., an outbuilding or garage).''

(ZZZ) 40 CFR 279.82(a)

— delete '', except when such activity takes place in one of the states listed in paragraph (c) of this section''

(3) In addition to the provisions incorporated by reference in subdivisions (1) and (2) of this subsection, the provisions in subsections (b) to (e), inclusive, of this section shall also apply.

(b) **Used Oil Generators**

Except as provided for in 40 CFR 279.20(a)(1) to (4), inclusive, the following provisions apply to generators of used oil:

(1) (A) To ensure that used oil is not a hazardous waste under the rebuttable presumption of 279.10(b)(1)(ii), a used oil generator shall determine whether the total halogen content of each used oil generated by such generator is less than, greater than, or equal to 1,000 parts per million. The generator shall make this determination by:

(i) Testing a representative sample of the used oil using any one of the following test methods: (i) EPA Method 9075, 9076 or 9077; (ii) EPA Method 5050, coupled with either EPA Method 9056 or 9253; (iii) American Society for Testing and Materials (''ASTM'') Method D808-95; or (iv) an alternative method which, before use, has been approved by the commissioner in writing. For purposes of this subparagraph, all references to EPA Methods shall mean the test method as described in EPA Publication SW-846, ''Test Methods for Evaluating Solid Waste—Physical/Chemical Methods,'' Edition III, as may be amended from time to time; or

(ii) Applying knowledge of the halogen content of the used oil in light of the materials or processes used by such generator, provided the generator retains documentation demonstrating whether the used oil contains greater than, less than or equal to 1,000 parts per million total halogens.

(B) If a generator's used oil contains more than 1,000 parts per million total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 40 CFR 261, Subpart D. To rebut the presumption that the used oil has been mixed with the hazardous waste designated in 40 CFR 261.31(a) as F001 or F002, a generator shall demonstrate by analysis or other means that none of the following halogenated hazardous waste constituents are present in the used oil at greater than 100 parts per million: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane. To rebut the presumption that the used oil has been mixed with any other hazardous waste listed in 40 CFR 261, Subpart D, (i.e., hazardous wastes other than F001 and F002) a generator shall demonstrate by analysis or other means that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of 40 CFR 261). Unless and until such a generator has rebutted the presumption, a used oil containing more than 1,000 parts per million total halogens shall be considered a hazardous waste and shall be managed as such. In addition, the rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated parrafins or used oil contaminated with chlorofluorocarbons as provided for in 40 CFR 279.10(b)(1)(ii)(A) and (B).

(C) Record retention. Records of analyses conducted or information used to comply with this subdivision shall be maintained by the generator for at least 3 years from the date the record is first created.

(2) Secondary Containment. Generators shall comply with the following requirements for each storage area, and for each tank or container used to store greater than fifty-five (55) gallons of used oil.

(A) Containers used to store used oil shall be stored on a surface that is sufficiently impervious to prevent any used oil released from such containers from migrating to the soil, groundwater or surface water. In addition, containers used to store used oil that are not within an enclosed building as defined in subparagraph (E) of this subdivision, shall be equipped with a secondary containment system. The secondary containment system shall consist of, at a minimum:

(i) dikes, berms or retaining walls, and

(ii) a floor which covers the entire area within the dikes, berms, or retaining walls; or

(iii) an equivalent secondary containment system.

(B) New and existing aboveground tanks used to store used oil shall be stored on a surface that is sufficiently impervious to prevent any used oil released from such tanks from migrating to the soil, groundwater or surface water.

(C) Existing aboveground tanks used to store used oil that are not within an enclosed building as defined in subparagraph (E) of this subdivision, shall be equipped with a secondary containment system. The secondary containment system shall consist of, at a minimum:

(i) dikes, berms or retaining walls, and

(ii) a floor which covers the entire area within the dikes, berms, or retaining walls except areas where existing portions of the tank meet the ground; or

(iii) an equivalent secondary containment system.

(D) New aboveground tanks used to store used oil that are not within an enclosed building as defined in subparagraph (E) of this subdivision, shall be equipped with a secondary containment system. The secondary containment system shall consist of, at a minimum:

(i) dikes, berms or retaining walls, and

(ii) a floor which covers the entire area within the dikes, berms, or retaining walls; or

(iii) an equivalent secondary containment system.

(E) As used in subparagraphs (A), (C) and (D) of this subdivision, an ''enclosed building'' means a structure which is enclosed with a floor, walls and a roof to prevent tanks and containers containing used oil from being exposed to the elements (e.g., precipitation, wind, run-on) and to ensure containment of any used oil released from any tank or container. For purposes of this definition, a wall may consist in part of windows, doors or other openings (such as service bays).

(c) **Used Oil Transporters**

Used oil transporters shall comply with 40 CFR 279.45(d) while transferring used oil from one transport vehicle to another. For purposes of this subsection, each transport vehicle and all associated piping shall be considered a container. Transporters transferring used oil from one transport vehicle to another may also require a permit under section 22a-454(c) of the Connecticut General Statutes.

(d) **Used Oil Processors and Re-refiners**

(1) Closure. The owner or operator of a facility subject to 40 CFR 279, Subpart F shall, within 90 days after receiving the final volume of used oil in a tank or container, remove from such tank or container all used oil. The commissioner may approve, in writing, a longer period if the owner or operator demonstrates that:

(A) The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

(B) (i) The tank or container at issue is operated in accordance with the requirements of 40 CFR 279.54(a) to (g), inclusive;

(ii) There is a reasonable likelihood that the owner operator or another person will recommence using such tank or container within one year; and

(iii) Closure of such tank or container is incompatible with continued operation of the site; and

(C) The owner or operator has taken and will continue to take all steps deemed necessary by the commissioner to prevent threats to human health and potential releases to the environment from such tank or container.

(2) The owner or operator must complete the closure activities specified in 40 CFR 279.54(h)(1) and (h)(2) within 180 days after the tank or container being closed receives the final volume of used oil. The commissioner may approve, in writing, an extension to the closure period if the owner or operator demonstrates that:

(A) The closure activities will, of necessity, take longer than 180 days to complete; or

(B) (i) The tank or container at issue is operated in accordance with the requirements of 40 CFR 279.54(a) to (g), inclusive;

(ii) There is reasonable likelihood that the owner or operator or another person will recommence operation of such tank or container within one year; and

(iii) Closure of the tank or container is incompatible with continued operation of the site; and

(C) The owner or operator has taken and will continue to take all steps deemed necessary by the commissioner to prevent threats to human health and potential releases to the environment from such tank or container.

(3) The demonstrations referred to in subdivision (1) and (2) of this subsection must be made as follows:

(A) The demonstration in subdivision (1) must be made at least 30 days prior to the expiration of the 90 day period referenced in subdivision (1); and

(B) The demonstration in subdivision (2) must be made at least 30 days prior to the expiration of the 180 day period referenced in subdivision (2).

(e) **Other Applicable Requirements**

Any person subject to section 22a-449(c)-119 of the Regulations of Connecticut State Agencies shall also comply with all applicable provisions of the Connecticut General Statutes, regulations of Connecticut State Agencies, and the terms and conditions of any order or permit, including a general permit, issued by the commissioner regarding used oil. This includes, but is not limited to, the requirement to obtain a permit under section 22a-454 of the Connecticut General Statutes. Compliance with the requirements of section 22a-449(c)-119 of the Regulations of Connecticut State Agencies shall not be deemed to be compliance with and shall not satisfy any other requirement imposed by the Connecticut General Statutes, regulations of Connecticut State Agencies, or an order or permit issued by the commissioner, including a general permit, regarding used oil. Through issuance of a permit or order, the commissioner may impose requirements in addition to those specified in section 22a-449(c)-119 of the Regulations of Connecticut State Agencies.

(Adopted effective October 31, 2001; amended June 27, 2002)

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Underground Storage Tank System Management

Sec. 22a-449 (d)-1. Control of the nonresidential underground storage and handling of oil and petroleum liquids

(a) **Definitions, applicability and purpose**

(1) Applicability

Owners and operators of the following types of facilities, as defined in subdivision (2) of this subsection, shall comply with the requirements of this section:

(A) Facilities used for storing heating oil for consumptive use on the premises where stored; and

(B) Farm facilities of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.

(2) As used in this section:

Definitions

''Abandoned'' means rendered permanently unfit for use.

''Abnormal loss or gain'' means an apparent loss or gain in liquid exceeding 0.5 percent of (1) the volume of product used or sold by the owner or operator during any seven consecutive day period, or (2) the volumetric capacity of the tank or container; whichever is greater, as determined by reconciliation of inventory measurements made in accordance with subsection 22a-449 (d)-1 (g) of these regulations.

''CFR'' means the Code of Federal Regulations revised as of July 1, 1991, unless otherwise specified.

''Discharge'' means the emission of any water, substance or material into the waters of the state, whether or not such substance causes pollution.

''Existing facility'' means a facility the construction or installation of which began prior to November 1, 1985, including, but not limited to, facilities which are abandoned and facilities which are temporarily out-of-service.

''Facility'' means a system of interconnected tanks, pipes, pumps, vaults, fixed containers and appurtenant structures, singly or in any combination, which are used or designed to be used for the storage, transmission or dispensing of oil or petroleum liquids, including any monitoring devices. As used in Section 22a-449 (d)-1 of these regulations, the term ''facility'' refers only to nonresidential underground facilities and does not include residential underground heating oil storage tank systems.

''Failure'' means a condition which can or does allow the uncontrolled passage of liquid into or out of a facility, and includes but is not limited to a discharge to the waters of the state without a permit issued pursuant to Section 22a-430 of the General Statutes.

''Failure determination'' means the evaluation of a facility component in accordance with subsection 22a-449 (d)-1 (i) of these regulations to determine whether a failure has occurred.

''Farm'' means a tract of land devoted to the production of crops or raising of animals, including, but not limited to, fish, and associated residences and improvements, including fish hatcheries, rangeland and nurseries with growing operations;

''Flammable Liquid'' means a flammable liquid as determined in accordance with NFPA 30 and having a flash point below 100 degrees fahrenheit (37.8 degrees centigrade) and having a vapor pressure not exceeding 40 pounds per square inch (absolute) (2,068 millimeters mercury) at 100 degrees fahrenheit (37.8 degrees centigrade).

''Life expectancy'' means the time period within which a failure is not expected to occur as determined in accordance with subsection 22a- 449 (d)-1 (h) of these regulations.

''Life expectancy determination'' means the evaluation of a facility component in accordance with subsection 22a-449 (d)-1 (h) of these regulations to determine its life expectancy.

''Liquid'' means any fluid, including, but not limited to, oil and petroleum fluids.

''Listed'' means included in a list published by a testing laboratory which (1) is approved by the Commissioner of Environmental Protection in consultation with the Bureau of the State Fire Marshal, (2) maintains periodic inspection of production of listed equipment or materials, and (3) states in their listing either that the equipment, material or procedure meets appropriate standards or has been tested and found suitable for use in a specified manner.

''New facility'' means a facility the construction or installation of which begins on or after November 1, 1985, including, but not limited to, facilities which replace existing facilities, facilities which are moved from one location to another, facilities which are abandoned, and facilities which are temporarily out-of-service.

''NFPA 30'' means National Fire Protection Association publication number 30 entitled, ''Flammable and Combustible Liquids Code,'' as enforced by the State Fire Marshal pursuant to Section 29-320 of the Connecticut General Statutes and Sections 29-320-1, 29-320-2, and 29-320-3 of the Regulations of Connecticut State Agencies, as of the effective date of these regulations.

''NFPA 329'' means National Fire Protection Association publication number 329 entitled, ''Underground Leakage of Flammable and Combustible Liquids,'' as enforced by the state fire marshal pursuant to Section 29-320 of the Connecticut General Statutes and Sections 29-320-1, 29-320-2, and 29-320-3 of the Regulations of Connecticut State Agencies, as of the effective date of these regulations.

''Nonresidential'' when referring to a facility means a facility which serves any commercial, industrial, institutional, public or other building, including, but not limited to, hotels and motels, boarding houses, hospitals, nursing homes and correctional institutions, but not including residential buildings.

''Oil or petroleum liquid'' or ''product'' means oil or petroleum of any kind in liquid form including, but not limited to, waste oils and distillation products such as fuel oil, kerosene, naphtha, gasoline and benzene.

''Operator'' means the person or municipality in control of, or having responsibility for, the daily operation of a facility.

''Owner'' means the person or municipality in possession of or having legal ownership of a facility.

''Residential building'' means any house, apartment, trailer, mobile home, or other structure, composed of four residential units or fewer, occupied by individuals as a dwelling provided that if the structure is not used solely as a dwelling, the nominal capacity of the facility, exclusive of piping, serving such structure does not exceed two thousand one hundred (2,100) gallons.

''Residential underground heating oil storage tank system'' has the same meaning as provided in section 22a-449a(6) of the Connecticut General Statutes.

''Substantial modification'' means the construction or installation of any addition to a facility or the restoration or renovation of a facility which: increases or decreases the on-site storage capacity of the facility; significantly alters the physical configuration of the facility; or impairs or improves the physical integrity of the facility or its monitoring systems; or modifies the facility so as to comply with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) of these regulations.

''Substantial modification'' shall not include a modification for the purpose of extending life expectancy in accordance with subparagraph 22a-449(d)-1 (h) (2) (D) of these regulations.

''Temporarily out-of-service'' means not in use, in that no regular filling or drawing is occurring; or not established and maintained in accordance with these regulations; or not regularly attended and secured.

''Underground'' when referring to a facility or facility component means that ten percent or more of the volumetric capacity of the facility or component is below the surface of the ground and that portion which is below the surface of the ground is not fully visible for inspection.

(3) Purpose

The purpose of Section 22a-449(d)-1 is to establish standards for the construction, operation, maintenance, and closure of certain nonresidential underground facilities, as specified in subsection (a)(1) of this section, that contain oil or petroleum liquids and that are not regulated under sections 22a-449(d)-101 to 22a-449(d)-113, inclusive, of the Regulations of Connecticut State Agencies.

(b) **Discharges prohibited**

No owner or operator shall discharge any water, substance or material, including but not limited to oil or petroleum liquids, from any facility to the waters of the state without first obtaining a permit for such discharge pursuant to Section 22a-430 of the General Statutes, as amended.

(c) **Exemptions**

(1) Facilities which meet all of the following criteria are exempt from subsections 22a-449 (d)-1 (d), (g), (h) and (i) of these regulations:

(A) the nominal capacity exclusive of piping is less than two thousand one hundred (2,100) gallons; (B) the sole intended use of the oil or petroleum liquid is for on-site heating or intermittent stationary power production such as stand-by electricity generation or irrigation pump power; (C) the oil or petroleum liquid stored is not intended for resale; and (D) the facility is not used for the storage or handling of waste oil.

(2) Facilities which are used solely for the storage, transmission or dispensing of viscous oil and petroleum liquids which will not flow at temperatures below sixty degrees Fahrenheit (60°)are exempt from the requirements of these regulations. For the purpose of this subdivision, a liquid will be deemed to flow if, when maintained for at least forty-eight hours at a temperature of sixty degrees fahrenheit (60°) and at a pressure of 14.7 pounds per square inch absolute, it assumes the shape of a container also maintained at a temperature of sixty degrees fahrenheit for at least forty-eight hours.

(3) Facilities used solely for on-site heating, process steam generation, other on-site combustion or manufacturing processes or waste oil storage are exempt from subdivision 22a-449 (d)-1 (g) (2).

(d) **Reporting**

(1) By May 8, 1986, the owner or operator of each existing facility shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by subsection (h).

(2) Within thirty days following completion of installation of a new facility an owner or operator shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by subsection (h).

(3) The notification required by subdivisions (1) and (2) of this subsection shall include but not be limited to the following: facility location and capacity, date of installation, contents, type of facility, and type of monitoring systems, if any, results of life expectancy determinations, and any other information which the commissioner deems necessary.

(4) By May 8, 1986, the owner or operator of an abandoned or temporarily out-of-service facility shall notify the commissioner of the location, type and capacity of such facility and the date it was abandoned or removed from service.

(5) Within thirty days of completion of a failure determination required by subsection (i), the owner or operator shall notify the commissioner and the office of the local fire marshal of the result of such failure determination.

(6) Owners and operators shall report any changes in information provided in accordance with this subsection within thirty days.

(7) Each notification required by this subsection shall be submitted on forms furnished or prescribed by the commissioner.

(e) **Design, construction, installation, and maintenance**

(1) All new facilities and new components of substantially modified facilities shall conform to the following standards:

(A) Each underground tank or container shall:

(i) be a listed fiberglass-reinforced plastic (FRP) tank which is equipped with contact plates under all fill and gauge openings and is chemically compatible with the contained oil or petroleum liquid as determined by the tank or container manufacturer's warranty; or

(ii) be a listed steel tank externally coated with a factory applied corrosion resistant coating approved by the manufacturer for the proposed use, and equipped with cathodic protection and permanent cathodic protection monitoring devices, and contact plates under all fill and gauge openings.

(B) All other underground facility components that routinely contain regulated substances and are in contact with the ground shall:

(i) be protected against corrosion by use of non-corrosive materials or steel components with factory applied corrosion resistant coating and cathodic protection and permanent cathodic protection monitoring devices;

(ii) be designed, constructed and installed so as to allow failure determination of all underground piping without the need for substantial excavation; and

(iii) be chemically compatible with the contained oil or petroleum liquid as determined by the manufacturer's warranty.

(C) The installation and maintenance of underground components of new facilities and the substantial modification of underground components of new or existing facilities shall be done in accordance with NFPA 30 and the manufacturer's specifications and recommendations. If provisions of NFPA 30 are inconsistent with the manufacturer's specifications or recommendations, the provision which imposes the most stringent and protective requirement shall control. Within thirty (30) days after completion of installation, the owner or operator shall submit to the commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with this subsection.

(D) All cathodic protection monitoring devices and cathodic protection systems for underground components shall meet the specifications of the manufacturer of the component(s) being protected and shall be installed and maintained in accordance with the specifications and recommendations of the manufacturer(s) of the monitoring device, the cathodic protection system, and the underground component being protected, as applicable. If a manufacturer's specifications or recommendations are inconsistent with any provision of these regulations, the provision which imposes the most stringent and protective requirement shall control. Within thirty (30) days after completion of installation, the owner or operator shall submit to the commis-

sioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with this subsection.

(E) All cathodic protection systems which protect underground facility components shall be tested annually. A structure to soil test voltage reading of at least minus 0.85 volts measured between the structure and a copper-copper sulfate electrode must be maintained. Voltage drops other than those across the structure electrolyte boundary must be considered for valid interpretation of the voltage measurements. Impressed current cathodic protection systems shall be checked monthly to assure that the system rectifier providing the source of current is operating properly. A monthly record of rectifier current and voltage output shall be maintained. If any cathodic protection system malfunctions or fails to meet the above structure to soil test voltage requirement, it shall be repaired as quickly as possible but in no event later than thirty (30) days from the date of discovery of the malfunction. Anodes shall be replaced when all other corrective measures which have been taken are not sufficient to maintain the structure to soil test voltage of at least minus 0.85 volts. Other cathodic protection criteria may be used upon written approval of the commissioner.

(2) No owner or operator of an existing facility shall use or operate any underground component of that facility beyond September 1, 1989, or for longer than five years beyond its life expectancy as determined in accordance with subsection 22a-449 (d)-1 (h) of these regulations, whichever is later, unless such component is modified so as to comply with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) above. If life expectancy has not been determined in accordance with subsection 22a-449 (d)-1 (h) of these regulations, such component shall not be used or operated unless such component is modified so as to comply with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) above. If the component is not so modified, it must be removed or abandoned in accordance with procedures specified in NFPA 30.

(3) No underground component of a facility shall be moved from one location to another without prior written approval of the commissioner.

(4) No owner or operator of a facility that complies with the standards for new facilities specified in subdivision 22a-449 (d)-1(e) (1) above shall use or operate any underground component of that facility beyond its life expectancy as determined in accordance with subsection 22a-449 (d)-1 (h) of these regulations. Prior to the last day of the life expectancy of an underground component of a facility that complies with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) above, the owner or operator shall remove or abandon the underground component in accordance with the procedures specified in NFPA 30.

(f) **Transfer of facilities**

(1) No owner or operator shall transfer ownership, possession or control of any new or existing facility without full disclosure to the transferee of the status of the facility with respect to compliance with these regulations at least fifteen (15) days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to subsection (d).

(g) **Records; abnormal loss or gain**

(1) Activity records. The owner or operator of a new or existing facility shall assure the maintenance of up-to-date records of significant construction or installation activities; monitoring; substantial modifications; abandonment, removal or replacement of underground components or protective devices for such components; and any other activity required by an order of the commissioner. The owner or

operator shall review such records and attest to their accuracy by signing them no later than seven days following completion of the recorded activity.

(2) Daily inventory records (A) The owner or operator of a new or existing facility shall assure that the following information is recorded: on a daily basis, the amount of product sold, used and received, and the level of water and product in the tank or container; and on a weekly basis, a reconciliation comparing these figures to determine whether an abnormal loss or gain has occurred. Separate records shall be maintained for each system of interconnected tanks or containers and serving pumps or dispensers. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following their recording.

(B) Daily inventory measurements shall be made by gauge or gauge stick or by readout from a listed automatic monitoring device. Such measuring devices shall be calibrated in accordance with the manufacturer's specifications and recommendations.

(C) Daily inventory measurements need not be recorded on those days when a facility is not in operation, except that if such period exceeds fifteen consecutive days inventory measurements shall be recorded on every fifteenth day. A day on which product is delivered to the facility shall be considered a day of operation.

(D) The commissioner may require an owner or operator to perform a failure determination of any facility for which daily inventory records are not maintained in accordance with this subsection.

(E) When inventory reconciliation indicates an abnormal loss or gain which is not explainable by spillage, temperature variations or other known causes, the owner or operator shall assure the immediate investigation and correction of the source of the abnormal loss or gain. At a minimum, the owner or operator shall take as many of the following steps as necessary to confirm an abnormal loss or gain:

(i) When an inventory record error is not apparent, a recalculation to determine abnormal loss or gain shall be made starting from a point where the records indicate no abnormal loss or gain;

(ii) A detailed visual inspection of those components of the facility which are readily accessible for evidence of failure shall be performed;

(iii) The dispensers of the particular oil or petroleum liquid in question shall be checked for proper calibration;

(iv) A failure determination shall be performed on the piping system between the storage tank or container and dispenser(s) in accordance with subsection (i) of these regulations; and

(v) A failure determination shall be performed on the tank or container in accordance with subsection (i) of these regulations.

(F) When an abnormal loss or gain is confirmed, the owner or operator shall immediately report the abnormal loss or gain to the state police in accordance with Section 22a-450 of the General Statutes, as amended.

(3) All records required by subdivisions (1) and (2) of this subsection shall be kept on the premises of the facility for a period of at least five years and shall be available for immediate inspection by the commissioner or his or her representative during reasonable hours.

(h) **Life Expectancy**

This subsection, in conjunction with subsection 22a-449 (d)-1 (i) of these regulations, specifies when a failure determination must be performed, and when the owner and operator must discontinue use of a facility component in accordance with subdivisions 22a-449 (d)-1 (e) (2) and (e) (4) of these regulations.

(1) Life expectancy determinations shall be conducted for underground components of new facilities within thirty (30) days following completion of installation or substantial modification of the component, and shall be conducted for underground components of existing facilities by May 8, 1986, as specified in subsection 22a-449 (d)-1 (d) of this section.

(2) Life expectancy shall be as follows:

(A) For fiberglass-reinforced plastic (FRP) facility components, the period of the manufacturer's corrosion or structural warranty, whichever is shorter.

(B) For cathodically protected facility components that meet the requirements of subdivision 22a-449 (d)-1 (e) (1) of these regulations, the period of the manufacturer's corrosion or structural warranty, whichever is shorter, or the life expectancy of the existing or replacement anode(s) as calculated using standard formulae approved in writing by the commissioner. If the cathodic protection system malfunctions or fails to meet the structure to soil voltage requirement in subparagraph 22a-449 (d)-1 (e) (1) (E) of these regulations, and is not repaired or replaced within thirty days, the life expectancy of the facility components protected by the system shall be reestablished in accordance with either subparagraph (2) (C) or subdivision (3) of this subsection. If life expectancy must be reestablished in accordance with subparagraph 22a-449 (d)-1 (2) (C) of these regulations, the period specified by subparagraph 22a-449 (d)-1 (2) (C) of these regulations shall be deemed to have begun on the earliest date of malfunction or the earliest date on which the structure to soil test voltage reading was less negative than minus 0.85 volts, as applicable, provided that the period specified by subparagraph 22a-449 (d)-1 (2) (C) of these regulations shall not extend beyond the last day of the component's initial life expectancy period.

(C) For facility components not covered in subparagraphs (2) (A) and (2) (B) of this subsection, fifteen years from the date of installation. If the date of installation cannot be documented, the life expectancy shall be determined by a method approved by the commissioner.

(D) The life expectancy of existing facility components which are not in compliance with the standards listed in subdivision 22a-449 (d)-1 (e) (1) of these regulations may be extended by any method, provided:

(i) a failure of the facility component in question has never occurred, as determined by a failure determination conducted in accordance with subdivision 22a-449 (d)-1 (i) (1) of these regulations, or by an alternative method used with the prior written approval of the commissioner;

(ii) the facility component shall not be used or operated for longer than five years beyond its extended life expectancy;

(iii) no tank or container shall be lined more than once to extend its life expectancy;

(iv) the period for which the life expectancy will be extended shall be determined by the owner or operator in a manner approved in writing by the commissioner;

(v) the facility component has not exceeded its original life expectancy as of the date of lining installation; and

(vi) the facility component is not used to store gasoline or other flammable liquids.

(3) The life expectancy of a facility component may be determined by a method other than those set forth in subdivision (2) of this subsection upon written approval of the commissioner.

(i) **Failure determination**

(1) Failure determinations shall consist of any test that takes into consideration the temperature coefficient of expansion of the product being tested as related to

any temperature change during the test, and is capable of detecting a loss of 0.05 gallons per hour. Such test shall be conducted in accordance with NFPA 329. Failure determination equipment and any methods of release detection shall be installed, calibrated, operated and maintained in accordance with the manufacturer's instructions including routine maintenance and service checks for operability and running condition.

(2) Failure determinations shall be conducted by the owner or operator for all underground components of new and existing facilities as follows:

(A) On all fiberglass-reinforced plastic (FRP) facility components, within three to six months after their installation, and within twenty-four to twenty-one months and within twelve to nine months prior to the end of their life expectancy.

(B) On all cathodically protected facility components, within twenty-four to twenty-one months and within twelve to nine months prior to the end of their life expectancy.

(C) Beginning on November 1, 1988, on all existing facility components which are not in compliance with the standards listed in subdivision 22a-449 (d)-1 (e) (1) of these regulations, within thirty-six to thirty-three months prior to the end of their life expectancy and annually thereafter.

(3) Alternative methods and schedules for failure determination may be used with the prior written approval of the commissioner.

(j) **Failures**

(1) An owner or operator of a new or existing facility shall report any failure to the state police immediately, in accordance with Section 22a-450 of the Connecticut General Statutes, as amended.

(2) The owner or operator of a new or existing facility at which a failure occurs shall immediately empty and discontinue the use of the failed facility component and:

(A) Remove or abandon it within ninety days in accordance with procedures specified in NFPA 30; or

(B) Repair it within sixty days; or

(C) Replace all damaged components in accordance with the standards listed in subdivision (e) (1) of these regulations.

(3) The owner or operator of a new or existing facility which discharges oil or petroleum liquids without a permit issued pursuant to Section 22a-430 of the General Statutes shall immediately cease such discharge and reclaim, recover and properly dispose of the discharged liquid and any other substance contaminated by it, restore the environment to a condition and quality acceptable to the commissioner, and repair damage caused by the discharge, all to the satisfaction of the commissioner.

(4) When a failure occurs at a new or existing facility, all of such facility's components shall be evaluated within thirty days to determine whether similar conditions to that which caused the failure exist. Within ten (10) days following such evaluation, the owner or operator shall notify the commissioner in writing of the methods and results of each such evaluation. If an additional failure is detected, the owner or operator shall act in accordance with this subsection.

(k) **Abandoned and temporarily out-of-service facilities**

(1) An owner or operator shall notify the commissioner in writing within thirty days when a new or existing facility is abandoned or rendered temporarily out-of-service.

(2) A facility or facility component shall be abandoned in accordance with procedures specified in NFPA 30.

(3) No person or municipality shall use or operate an abandoned facility.

(4) No person or municipality shall use or operate a temporarily out-of-service facility without giving prior written notice to the commissioner that such facility will be used or operated.

(*l*) **Variances**

(1) The commissioner may grant a variance or partial variance from one or more of the provisions of this section provided such variance will not endanger the public health, safety or welfare or allow pollution of the air, land or waters of the state. An application for a variance shall be submitted by the owner or operator on a form furnished or prescribed by the commissioner and shall include such information as he or she requires.

(2) Failure to supply all information necessary to enable the commissioner to make a determination regarding the application shall be cause for rejection of the application.

(3) In acting on a request for a variance, the commissioner shall balance the degree to which compliance with the requirement in question would create an undue hardship for the applicant, against the benefit to the environment and the public from the applicant's strict compliance with that requirement.

(4) The commissioner may reject an application for a variance as untimely if it is received less than ninety days prior to the required date of compliance for which the variance is sought or if the facility is not in compliance with the requirement for which the variance is sought. For those existing facilities or underground components which are required to be removed or modified by September 1, 1989 in accordance with subparagraph (e) (2) of this section, no application for a variance from the requirements of that subparagraph shall be accepted after August 1, 1988, which date was the original deadline for such applications when these regulations were first adopted.

(5) The commissioner may limit the duration of a variance and include in a variance any conditions which he or she deems necessary. A variance may be revoked or modified for failure to comply with any such conditions.

(Effective July 28, 1994; amended May 31, 2012)

Secs. 22a-449 (d)-2—22a-449 (d)-100. Reserved

Sec. 22a-449 (d)-101. Technical standards and corrective action requirements for owners and operators of underground storage tank systems-program scope and interim prohibition

(a) **Applicability and purpose of sections 22a-449 (d)-101 through 22a-449 (d)-113.**

(1) The requirements of sections 22a-449 (d)-101 through 22a-449 (d)-113 shall apply to all owners and operators of an UST system, as defined in section 22a-449 (d)-101 (d), except as otherwise provided in subdivisions (a) (2), (a) (3), and (a) (4) of section 22a-449 (d)-101. Any UST system listed in subdivision (a) (3) of section 22a-449 (d)-101 shall meet the requirements in subsection (b) of section 22a-449 (d)-101. Any UST system listed in subparagraphs (a) (2) (C), (a) (2) (D), (a) (2) (E) and (a) (2) (F) and in subparagraphs (a) (3) (C), (a) (3) (D), and (a) (3) (E) of section 22a-449 (d)-101 which is used for the storage, transmission or dispensing of oil or petroleum liquids, as defined in section 22a-449 (d)-1 (a) of the Regulations of Connecticut State Agencies (''RCSA''), shall meet the requirements of section 22a-449 (d)-1.

(2) The following UST systems are excluded from the requirements of section 22a-449 (d)-101 through section 22a-449 (d)-113 of these regulations:

(A) Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;

(B) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307 (b) of the Clean Water Act;

(C) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;

(D) Any UST system whose capacity is 110 gallons or less;

(E) Any UST system that contains a de minimis concentration of regulated substances; and

(F) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

(3) Deferrals. Sections 22a-449 (d)-102, 103, 104, 105, and 107 do not apply to any of the following types of UST systems:

(A) Wastewater treatment tank systems;

(B) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following);

(C) Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR part 50, appendix A;

(D) Airport hydrant fuel distribution systems; and

(E) UST systems with field-constructed tanks.

(4) Deferrals. Section 22a-449 (d)-104 does not apply to any UST system that stores fuel solely for use by emergency power generators, provided however that the owner and operator of any such UST system shall comply with the requirements of subsection 22a-449 (d)-1 (i) if the nominal capacity of such system, exclusive of piping, is greater than or equal to two thousand one hundred (2,100) gallons.

(5) Purpose. The purpose of sections 22a-449(d)-101 to 22a-449(d)-113 of the Regulations of Connecticut State Agencies is to establish a comprehensive regulatory program for underground storage tanks containing regulated substances subject to Subtitle I of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, and the regulations adopted thereunder at 40 CFR Parts 280 and 281.

(b) **Interim prohibition for deferred UST systems.**

(1) No person may install an UST system listed in subparagraph (a) (3) of section 22a-449 (d)-101 for the purpose of storing regulated substances unless the UST system (whether of single- or double-wall construction):

(A) Shall prevent releases due to corrosion or structural failure for the operational life of the UST system;

(B) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(C) Is constructed or lined with material that is compatible with the stored substance.

(2) Notwithstanding subdivision (b) (1) of section 22a-449 (d)-101, an UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life. Owners and operators shall maintain records that demonstrate compliance with the requirements of this paragraph for the remaining life of the tank.

(3) The National Association of Corrosion Engineers Standard RP-02-85, ''Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems,'' may be used as guidance for complying with subdivision (b)(2) of section 22a-449 (d)-101.

(c) **General.**

Nothing in sections 22a-449 (d)-101 through 22a-449 (d)-113 of these regulations shall affect the Commissioner's authority to enforce statutes, regulations, permits or orders administered, adopted or issued by the Commissioner, including, but not limited to, the Commissioner's authority to issue an order to prevent or abate pollution and potential source of pollution.

(d) **Definitions.**

When used in sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive of these regulations, the following terms shall have the meanings given below:

(1) ''Abandoned'' means rendered permanently closed and unfit for use, in accordance with subsection 22a-449 (d)-107 (b) of these regulations;

(2) ''Abnormal loss or gain'' means an apparent loss or gain in liquid exceeding 0.5 percent of (1) the volume of product used or sold by the owner or operator during any seven consecutive day period, or (2) the volumetric capacity of the tank or container; whichever is greater, as determined by reconciliation of inventory measurements made in accordance with section 22a-449 (d)-104 of these regulations;

(3) ''Aboveground release'' means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system;

(4) ''Ancillary equipment'' means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST;

(5) ''Approved training program'' means a Class A, B, or C Operator training program that meets the requirements of subsection 22a-449 (d)-108 (b) of the Regulations of Connecticut State Agencies.

(6) ''Belowground release'' means any release to the subsurface of the land and to ground water. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank;

(7) ''Beneath the surface of the ground'' means beneath the ground surface or otherwise covered with earthen materials;

(8) ''Cathodic protection'' is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current;

(9) ''Cathodic protection tester'' means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons shall have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems;

(10) ''CERCLA'' means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended;

(11) ''CFR'' means the Code of Federal Regulations revised as of July 1, 1991, unless otherwise specified;

(12) ''Class A Operator'' means the individual or individuals designated by the owner or operator to have primary statutory and regulatory responsibility for the operation and maintenance of the UST systems. The Class A Operator may hold more than one class of operator position. The designation as a 'Class A Operator' does not confer any other operator status upon the individual. Any person designated as a Class A Operator shall have fulfilled the training and certification requirements of an approved training program as set forth in section 22a-449(d)-108.

(13) ''Class B Operator'' means the individual or individuals designated by the owner or operator to implement applicable regulatory requirements and implement the daily aspects of the operation, maintenance, and recordkeeping for the UST systems. The Class B Operator may hold more than one class of operator position. The designation as a 'Class B Operator' does not confer any other operator status upon the individual. Any person designated as a Class B Operator shall have fulfilled the training and certification requirements of an approved training program as set forth in section 22a-449(d)-108.

(14) ''Class C Operator'' means the individual or individuals designated by the owner or operator to have primary responsibility for responding to alarms, emergencies presented by releases, and other problems associated with the operation of the UST systems. The Class C Operator may hold more than one class of operator position. The designation as a 'Class C Operator' does not confer any other operator status upon the individual. Any person designated as a Class C Operator shall have fulfilled the training and certification requirements of an approved training program as set forth in section 22a-449(d)-108.

(15) ''Commissioner'' means the Commissioner of Environmental Protection of the State of Connecticut, or the Commissioner's operator;

(16) ''Compatible'' means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the UST;

(17) ''Connected piping'' means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them;

(18) ''Consumptive use with respect to heating oil'' means consumed on the premises;

(19) ''Corrosion expert'' means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks;

(20) ''Day'' means calendar day, unless otherwise specified;

(21) ''Department'' or ''DEP'' means the Connecticut Department of Energy and Environmental Protection or DEEP* (*Public Act 11-80, effective July 1, 2011, established the Department of Energy and Environmental Protection as the successor agency to the Department of Environmental Protection);

(22) ''Dielectric material'' means a material that does not conduct direct electrical current.

Dielectric coatings are used to electrically isolate UST systems from the surrounding soils.

Dielectric bushings are used to electrically isolate portions of the UST system including, but not limited to, tank from piping;

(23) ''Discharge'' means the emission of any water, substance or material into the waters of the state, whether or not such substance causes pollution;

(24) ''Dispenser'' means equipment located above ground that meters the amount of regulated substances transferred to a point of use outside the UST system, such as a motor vehicle;

(25) ''Double-walled underground storage tank'' has the same meaning as provided in section 22a-449o(1) of the Connecticut General Statutes;

(26) ''Double-walled underground storage tank system'' means one or more double-walled underground storage tanks connected by double-walled piping and utilizing double-walled piping to connect the underground storage tank to any associated equipment;

(27) ''Electrical equipment'' means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable;

(28) ''Excavation zone'' means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation;

(29) ''Existing tank system'' means a tank system used to contain an accumulation of regulated substances or for which installation has commenced on or before December 22, 1988. Installation is considered to have commenced if:

(a) The owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and if,

(b) (1) Either a continuous on-site physical construction or installation program has begun; or,

(2) The owner or operator has entered into contractual obligations-which cannot be canceled or modified without substantial loss-for physical construction at the site or installation of the tank system to be completed within a reasonable time;

(30)''Failure'' means a condition which can or does allow the uncontrolled passage of liquid into or out of an UST system, and includes but is not limited to a discharge to the waters of the state without a permit issued pursuant to Section 22a-430 of the General Statutes;

(31) ''Farm tank'' is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank shall be located on the farm property. ''Farm'' includes fish hatcheries, rangeland and nurseries with growing operations;

(32) ''Flow-through process tank'' is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process;

(33) ''Free product'' refers to a regulated substance that is present as a non-aqueous phase liquid including, but not limited to, liquid not dissolved in water;

(34) ''Gathering lines'' means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations;

(35) ''Hazardous substance'' means a substance defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, but does not include any substance regulated as a hazardous waste under subsection (c) of Section 22a-449 of the General Statutes or any mixture of such substances and petroleum;

(36) ''Hazardous substance UST system'' means an underground storage tank system that contains a hazardous substance defined in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 but not including any substance regulated as a hazardous waste under subtitle C of the Resource Conservation and Recovery Act or any mixture of such substances and petroleum, and which is not a petroleum UST system;

(37) ''Heating oil'' means petroleum that is No. 1, No. 2, No. 4-light, No. 4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces;

(38) ''Hydraulic lift tank'' means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices;

(39) ''Implementing agency'' means the Connecticut Department of Energy and Environmental Protection* (*Public Act 11-80, effective July 1, 2011, established the Department of Energy and Environmental Protection as the successor agency to the Department of Environmental Protection);

(40) ''Life expectancy'' means the period of time within which a failure is not expected to occur as determined in accordance with section 22a-449 (d)-111;

(41) ''Life expectancy determination'' means the evaluation of an UST system component in accordance with section 22a-449 (d)-111 to determine its life expectancy;

(42) ''Liquid trap'' means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream;

(43) ''Maintenance'' means the normal operational upkeep to prevent an underground storage tank system from releasing product;

(44) ''Motor fuel'' means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is typically used in the operation of a motor engine;

(45) ''New piping containment sump'' means the sump housing a turbine pump or piping that distributes petroleum or regulated substances that (A) prevents any liquids that may accumulate in such containment sump, including but not limited to, liquid from the piping or pump, from leaving the containment sump and reaching soil, groundwater or surface waters; (B) is capable of immediate visual inspection and provides immediate access to the components of such sump and the components contained therein; (C) contains release detection equipment, such as a sensor, that at all times is capable of detecting any liquid that may accumulate in such containment sump, including but not limited to, liquid from the turbine pump or piping; and (D)

contains an alarm or other device that notifies the owner or operator immediately whenever a liquid accumulates in the containment sump;

(46) ''New tank system'' means a tank system that shall be used to contain an accumulation of regulated substances and for which installation has commenced after December 22, 1988, including UST systems that are moved from one location to another. (See also ''Existing Tank System'');

(47) ''New under-dispenser containment sump'' means a containment sump located underneath a dispenser that (A) prevents any liquids that may accumulate in such containment sump, including but not limited to, liquid from the dispenser, from leaving the containment sump and reaching soil, groundwater or surface waters; (B) is capable of immediate visual inspection and provides immediate access to the components of such sump and any components contained therein; (C) contains release detection equipment, such as a sensor, that at all times is capable of detecting any liquid that may accumulate in such containment sump, including but not limited to, liquid from the dispenser; and (D) contains an alarm or other device that notifies the owner or operator immediately whenever a liquid accumulates in the containment sump:

(48) ''Noncommercial purposes with respect to motor fuel'' means not for resale;

(49) ''On the premises where stored with respect to heating oil'' means UST systems located on the same property where the stored heating oil is used;

(50) ''Operational life'' refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under section 22a-449 (d)-107 of these regulations;

(51) ''Operator'' means any person in control of, or having responsibility for, the daily operation of the UST system. An Operator designation is not equivalent to designation as a ''Class A Operator'', ''Class B Operator'', or ''Class C Operator'', as defined in this section, solely by virtue of such designation. An Operator may be designated as a Class A, B, or C Operator only if that person has fulfilled the training and certification requirements of an approved training program as set forth in section 22a-449(d)-108 of the Regulations of Connecticut State Agencies;

(52) ''Operator Response Guidelines'' means guidelines that are in written form, including reporting procedures for releases and suspected releases, emergency contact phone numbers, malfunctioning equipment lock-out/tag-out and notification procedures, and initial mitigation protocol for releases, suspected releases and other emergencies;

(53)''Overfill release'' is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment;

(54) ''Owner'' means the person or municipality in possession of or having legal ownership of an UST system;

(55) ''Person'' means an individual, trust, firm, joint stock company, Federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. ''Person'' also includes a consortium, a joint venture, a commercial entity, and the United States Government;

(56) ''Petroleum UST system'' means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, used oils and any bio-fuel blend;

(57) ''Pipe or piping'' means a hollow cylinder or tubular conduit that is constructed of non-earthen materials;

(58) ''Pipeline facilities (including gathering lines)'' are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings;

(59) ''Regulated substance'' means:

(a) Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under subtitle C of the Resource, Conservation and Recovery Act), and (b) Petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). The term ''regulated substance'' includes but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, used oils and any bio-fuel blend;

(60) ''Release'' means any spilling, leaking, emitting, discharging, escaping, leaching or disposing from an UST into ground water, surface water or subsurface soils;

(61) ''Release detection'' means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it;

(62) ''Repair'' means to restore a tank or UST system component that has caused a release of product from the UST system;

(63) ''Residential tank'' is a tank located on property used primarily for dwelling purposes;

(64) ''SARA'' means the Superfund Amendments and Reauthorization Act of 1986;

(65) ''Septic tank'' is a water-tight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility;

(66) ''Storm-water or wastewater collection system'' means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance;

(67) ''Substantial modification'' means the construction or installation of any addition to an UST system or any restoration or renovation of an UST system which: increases or decreases the on-site storage capacity of the UST system; significantly alters the physical configuration of the UST system; or impairs or improves the physical integrity of the UST system or its monitoring system; or modifies the UST system so as to comply with the standards specified in subsection 22a-449 (d)-102 (a) of these regulations;

(68) ''Surface impoundment'' is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is not an injection well;

(69) ''Tank'' is a stationary device designed to contain an accumulation of regulated substances and constructed of non-earthen materials including, but not limited to, concrete, steel, and plastic that provide structural support;

(70) ''Under-dispenser containment sump'' means a containment sump located underneath a dispenser whose purpose is to prevent liquids that may accumulate in such containment sump, including but not limited to, liquid from the dispenser, from leaving the containment sump or from reaching the soil, groundwater or surface waters;

(71) ''Underground area'' means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor;

(72) ''Underground release'' means any belowground release;

(73) ''Underground storage facility'' means a parcel of real property on which a UST or UST system is located;

(74) ''Underground storage tank or UST'' means any one or combination of tanks (including underground pipes connected thereto) that is used or designed to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. This term does not include any:

(a) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;

(b) Tank used for storing heating oil for consumptive use on the premises where stored;

(c) Septic tank;

(d) Pipeline facility (including gathering lines) regulated under:

(1) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.), or

(2) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

(3) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in paragraph (d) (1) or (d) (2) of this definition;

(e) Surface impoundment, pit, pond, or lagoon;

(f) Storm-water or wastewater collection system;

(g) Flow-through process tank;

(h) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

(i) Storage tank situated in an underground area including, but not limited to, a basement, cellar, mineworking, drift, shaft, or tunnel if the storage tank is situated upon or above the surface of the floor. The term ''underground storage tank'' or ''UST'' does not include any pipes connected to any tank which is described in paragraphs (a) through (i) of this definition;

(75) ''Underground storage tank system or UST system'' means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any;

(76) ''Upgrade'' means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of product;

(77) ''Wastewater treatment tank'' means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

(78) The following terms are defined as provided in section 22a-449 (d)-1 of these regulations: ''liquid''; ''listed''; ''NFPA 30''; and ''temporarily out-of-service.''

(Effective July 28, 1994; amended May 31, 2012)

Sec. 22a-449 (d)-102. UST systems: design, construction installation and notification

(a) **Performance standards for new UST systems.**

In order to prevent releases due to structural failure, corrosion, or spills and overfills for the operational life of the UST system, all owners and operators of new UST systems shall meet the following requirements. Any substantial modification of UST systems shall meet the following requirements:

(1) Tanks. Each tank shall be listed and properly designed and constructed, and any portion underground that routinely contains product shall be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(A) The tank is constructed of fiberglass-reinforced plastic; or

(B) The tank is constructed of steel and cathodically protected including a permanent cathodic protection monitoring device in the following manner:

(i) The tank is coated with a factory applied suitable dielectric material approved by the manufacturer for the proposed use;

(ii) Field-installed cathodic protection systems are designed by a corrosion expert;

(iii) Impressed current systems are designed to allow determination of current operating status as required in subdivision 22a-449 (d)-103 (b) (3) of these regulations; and

(iv) Cathodic protection systems are operated and maintained in accordance with subsection 22a-449 (d)-103 (b) of these regulations and manufacturer's specifications to the extent such specifications are no less stringent than subsection 22a-449 (d)-103 (b) of these regulations, or according to guidelines established by the implementing agency and have permanent monitoring devices; or

(C) The tank construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than subdivisions 22a-449 (d)-102 (a) (1) (A) and (B) of these regulations and such protection has been approved in writing by the implementing agency prior to installation of the UST system.

(2) Tank Notes

(A) The following industry codes may be used to comply with subdivision 22a-449 (d)-102 (a) (1) (A) of these regulations: Underwriters Laboratories Standard 1316, ''Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products''; Underwriter's Laboratories of Canada CAN4-S615-M83, ''Standard for Reinforced Plastic Underground Tanks for Petroleum Products''; or American Society of Testing and Materials Standard D4021-86, ''Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks.''

(B) The following codes and standards may be used to comply with subdivision 22a-449 (d)-102 (a) (1) (B) of these regulations:

(i) Steel Tank Institute ''Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks'';

(ii) Underwriters Laboratories Standard 1746, ''Corrosion Protection Systems for Underground Storage Tanks'';

(iii) Underwriters Laboratories of Canada CAN4-S603-M85, ''Standard for Steel Underground Tanks for Flammable and Combustible Liquids,'' and CAN4-G03.1-M85, ''Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids,'' and CAN4-S631-M84, ''Isolating Bush-

ings for Steel Underground Tanks Protected with Coatings and Galvanic Systems''; or

(iv) National Association of Corrosion Engineers Standard RP-02-85, ''Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems,'' and Underwriters Laboratories Standard 58, ''Standard for Steel Underground Tanks for Flammable and Combustible Liquids.''

(3) Piping. The piping that routinely contains regulated substances and is not in contact with the ground shall meet the requirements in subparagraph 22a-449 (d)-102 (a) (9) of these regulations. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed, constructed, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(A) The piping is constructed of fiberglass-reinforced plastic; or

(B) The piping is constructed of steel and cathodically protected in the following manner:

(i) The piping is coated with a suitable dielectric material;

(ii) Field-installed cathodic protection systems are designed by a corrosion expert;

(iii) Impressed current systems are designed to allow determination of current operating status as required in subdivision 22a-449 (d)-103 (b) (3) of these regulations; and

(iv) Cathodic protection systems shall have permanent monitoring devices and shall be operated and maintained in accordance with subsection 22a-449 (d)-103 (b) of these regulations and manufacturer's specifications to the extent such specifications are no less stringent than subsection 22a-449 (d)-103 (b) of these regulations, or according to guidelines established by the implementing agency; or

(C) The piping construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in subparagraphs 22a-449 (d)-102 (a) (3) (A) and (B) of these regulations and such protection has been approved in writing by the implementing agency and have permanent monitoring services; prior to the installation of the UST system.

(4) Piping Notes

(A) The following codes and standards may be used to comply with subparagraph 22a-449 (d)-102 (a) (3) (A) of these regulations:

(I) Underwriters Laboratories Subject 971, ''UL Listed Non-Metal Pipe'';

(ii) Underwriters Laboratories Standard 567, ''Pipe Connectors for Flammable and Combustible and LP Gas'';

(iii) Underwriters Laboratories of Canada Guide ULC-107, ''Glass-Fiber-Reinforced Plastic Pipe and Fittings for Flammable Liquids''; and

(iv) Underwriters Laboratories of Canada Standard CAN 4-S633-M81, ''Flexible Underground Hose Connectors.''

(B) The following codes and standards may be used to comply with subparagraph 22a-449 (d)-102 (a) (3) (B) of these regulations:

(I) National Fire Protection Association Standard 30, ''Flammable and Combustible Liquids Code'';

(ii) American Petroleum Institute Publication 1615, ''Installation of Underground Petroleum Storage Systems'';

(iii) American Petroleum Institute Publication 1632, ''Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems''; and

(iv) National Association of Corrosion Engineers Standard RP-01-69, ''Control of External Corrosion on Submerged Metallic Piping Systems.''

(5) Spill and overfill prevention equipment.

(A) Except as provided in subparagraph 22a-449 (d)-102 (a) (5) (B) of these regulations to prevent spilling and overfilling associated with product transfer to the UST system, owners and operators shall use the following spill and overfill prevention equipment:

(I) Spill prevention equipment that shall prevent release of product to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin); and

(ii) Overfill prevention equipment that shall:

(a) Automatically shut off flow into the tank when the tank is no more than 95 percent full, or

(b) Alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm.

(B) Owners and operators are not required to use the spill and overfill prevention equipment specified in subparagraph 22a-449 (d)-102 (a) (5) (A) of these regulations if:

(I) Alternative equipment is used that is determined by the implementing agency to be no less protective of human health and the environment than the equipment specified in subparagraphs 22a-449 (d)-102 (a) (5) (A) (i) and (ii) of these regulations and such equipment has been approved in writing by the implementing agency prior to installation of the UST system; or

(ii) The UST system is filled by transfers of no more than 25 gallons at one time.

(6) Installation. All tanks and piping shall be properly installed and maintained in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions, NFPA 30 requirements and sections 22a-449 (d)-102 and 22a-449 (d)-103 of these regulations. If the provisions of these requirements are inconsistent, the provision which imposes the most stringent and protective requirement shall control. All underground piping shall be designed, constructed and installed so as to allow line and tank tightness testing in accordance with section 22a-449 (d)-104 of these regulations without the need for substantial excavation.

(7) Tank and piping system installation practices and procedures described in the following codes, to the extent such practices and procedures are no less stringent and protective than the requirements of NFPA 30, may be used to comply with the requirements of subdivision 22a-449 (d)-102 (a) (6) of these regulations:

(A) American Petroleum Institute Publication 1615, ''Installation of Underground Petroleum Storage System''; or

(B) Petroleum Equipment Institute Publication RP100, ''Recommended Practices for Installation of Underground Liquid Storage Systems''; or

(C) American National Standards Institute Standard B31.3, ''Petroleum Refinery Piping,'' and American National Standards Institute Standard B31.4 ''Liquid Petroleum Transportation Piping System.''

(8) Certification of Installation. Within thirty (30) days after completion of installation of an UST system component, the owner or operator shall submit to the Commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with sections 22a-449 (d)-101 through

22a-449 (d)-113 of these regulations. In addition all owners and operators shall ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with subdivision 22a-449 (d)-102 (a) (6) of these regulations by providing a certification of compliance on the UST notification form in accordance with subsection 22a-449 (d)-102 (b) of these regulations:

(A) The installer has been certified by the tank and piping manufacturers; or

(B) The installer has been certified or licensed by the implementing agency; or

(C) The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation; or

(D) The installation has been inspected and approved in writing by the implementing agency; or

(E) All work listed in the manufacturer's installation checklists has been completed; or

(F) The owner and operator have complied with another method for ensuring compliance with subdivision 22a-449 (d)-102 (a) (6) of these regulations that is determined by the implementing agency by prior written approval to be no less protective of human health and the environment.

(9) Piping. The metallic piping that routinely contains regulated substances and is not in contact with the ground shall be properly maintained and designed, constructed and protected from contact with the ground and ground water for its operational life. Such piping protection shall be continuously monitored during its operational life for failure. Records of such monitoring shall be maintained to demonstrate compliance with this protection and monitoring requirement in accordance with subsection 22a-449 (d)-103 (e).

(10) Cathodic protection systems. All cathodic protection systems shall have permanent monitoring devices and all cathodic protection monitoring devices and cathodic protection systems for UST system components shall meet the specifications of the manufacturer of the component(s) being protected and shall be installed and maintained in accordance with the specifications and recommendations of the manufacturer(s) of the monitoring device, the cathodic protection system, and the component being protected, as applicable. If a manufacturer's specifications and recommendations are inconsistent with any provision of sections 22a-449 (d)-102 and 22a-449 (d)-103 of these regulations, the provision which imposes the most stringent and protective requirement shall control. Within thirty (30) days after completion of installation, the owner or operator shall submit to the commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with section 22a-449 (d)-102 and 22a-449 (d)-103 of these regulations.

(11) On and after August 8, 2012, no owner or operator shall replace, install, operate or use an underground storage tank system installed on or after August 8, 2012, unless such underground storage tank system is equipped with a new under-dispenser containment sump.

(12) On and after August 8, 2012, no owner or operator shall replace or install a piping containment sump unless such piping containment sump is a new piping containment sump.

(13) On and after August 8, 2012, no owner or operator shall replace or install an under-dispenser containment sump unless such under-dispenser containment sump is a new under-dispenser containment sump.

(14) On and after August 8, 2012, no owner or operator shall replace: (1) a dispenser and more than fifty percent of flex-joint or flexible piping, that is physically

located directly beneath the dispenser, unless a new under-dispenser containment sump has been installed for such dispenser; or (2) more than fifty per cent of the dispensers at a facility, unless a new under-dispenser containment sump has been installed for each dispenser at the facility, except that the requirement of this subdivision shall not apply to a dispenser that is replaced due to damage resulting from an accident or vandalism.

(15) Testing requirements for double-walled underground storage tank systems installed on or after August 8, 2012.

(A) Before using or operating an underground storage tank system installed on or after August 8, 2012, the owner or operator of any such underground storage tank system shall conduct tests which demonstrate that there is no release or loss of any liquids from any part of the double-walled underground storage tank system. Such tests shall include a demonstration that, should any liquid accumulate in a new piping containment sump and in a new under-dispenser containment sump, it will not leave such sump or be released into the environment. The owner or operator shall perform such test upon installation and every 5 years thereafter. Secondary containment systems where the continuous monitoring automatically monitors both primary and secondary containment, such as systems that are hydrostatically monitored or under constant vacuum, are exempt from the testing every 5 years required by this subparagraph.

(B) The owner or operator of any underground storage tank system repairing a piping containment sump or under-dispenser containment sump installed on or after August 8, 2012, shall conduct a test that demonstrates that the repaired piping containment sump or under-dispenser containment sump meets the requirements of a new piping containment sump or new under-dispenser containment sump. The test and demonstration required for new under-dispenser containment sumps by this subparagraph shall be performed before the owner or operator begins to use or operate the dispenser associated with the new under-dispenser containment sump.

(C) The owner or operator of an underground storage tank system shall maintain the results of all testing to demonstrate compliance with this subdivision in accordance with the requirements of section 22a-449(d)-103(e)(4) of the Regulations of Connecticut State Agencies. The owner or operator of an underground storage tank system may store and retrieve electronically the results of all such testing. The owner or operator shall provide such results to the Commissioner upon request. The owner or operator shall use a qualified individual or company who has the expertise to perform and document the results of the testing required by this subdivision.

(D) Any test conducted to satisfy the requirements of this subdivision shall be capable of determining if there is a release or any loss of liquids from any part of the double-walled underground storage tank system, including any part of new piping containment sumps and new under-dispenser containment sumps. The owner or operator of an underground storage tank system shall perform the tests required by this subdivision using the best available technology or in accordance with the manufacturer's guidelines and standards. If there are no manufacturer's guidelines or standards, the owner or operator shall perform such tests in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer's guidelines or standards, industry codes, or engineering standards, the owner or operator shall perform such tests using a test method that, before use, is approved by a registered professional engineer licensed in the state of Connecticut.

(16) If an alarm, sensor or similar device in a new under-dispenser containment sump or a new piping containment sump indicates that liquid is present in such

sump, the owner or operator of such sump shall (A) immediately investigate to determine if liquid is present and identify the cause for the presence of such liquid; (B) immediately take corrective measures in accordance with all applicable federal, state, and local requirements; (C) remove all petroleum from such sump not later than twenty-four hours after any alarm or similar device indicates that liquids are present in such sump; and (D) remove all other liquids, including but not limited to, water, from such sump not later than seventy-two hours after any alarm or similar device indicates that liquids are present in such sump. Any liquids removed from any such containment sump shall be managed and disposed of in accordance with all applicable requirements.

(17) No person, including but not limited to an owner or operator, shall remove, disable or otherwise render inoperable any sensor in a new under-dispenser containment sump or new piping containment sump or any alarm or other device used to indicate whether liquids are present in any such sump. No owner or operator shall dispense petroleum or any hazardous substances from an underground storage tank system equipped with a new under-dispenser containment sump or a new piping containment sump if any sensor in such sump, or any alarm or other device used to indicate whether liquids are present in any such sump, is removed, disabled or otherwise inoperable.

(18) The requirements of this subsection regarding an under-dispenser containment sump shall not apply to an underground storage tank system that does not have a dispenser.

(b) **Notification requirements.**

(1) Any owner or operator of an UST system shall give notice to the commissioner in accordance with this subsection.

(2) By May 8, 1986, the owner or operator of each petroleum UST system, the construction or installation of which began prior to November 1, 1985, shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 of these regulations.

(3) Within 180 days of the effective date of these regulations, the owner or operator of each hazardous substance UST system, the construction or installation of which began prior to the effective date of these regulations, shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 these regulations.

(4) Within thirty (30) days following the completion of installation of a petroleum UST system, the construction or installation of which begins on or after November 1, 1985, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another; an owner or operator shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 of these regulations.

(5) Within thirty (30) days following the completion of installation of a hazardous substance UST system, the construction or installation of which began on or after the effective date of these regulations, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another; an owner or operator shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 of these regulations.

(6) The notification required by subdivisions 22a-449 (d)-102 (b) (2), (3), (4), and (5) of these regulations shall include but not be limited to the following: UST

system location and capacity, date of installation, contents, type of UST system, and type of monitoring systems, if any, results of life expectancy determinations, and other information which the commissioner deems necessary.

(7) By May 8, 1986, the owner or operator of an abandoned or temporarily out-of-service UST system shall notify the commissioner of the location, type, and capacity of such UST system and the date it was abandoned or removed from service.

(8) An owner or operator of a UST system shall notify the commissioner in writing within thirty (30) days when a UST system is abandoned or rendered temporarily out-of-service.

(9) No person or municipality shall use or operate a temporarily out-of-service UST system without giving prior written notice to the commissioner that such UST system shall be used or operated.

(10) Within thirty (30) days of completion of a tank tightness test or line tightness test required by sections 22a-449 (d)-101 through 22a-449 (d)-113 of these regulations, the owner or operator shall notify the commissioner and the office of the local fire marshal of the result of such tightness test.

(11) Owners and operators shall report any changes in information provided in accordance with section 22a-449 (d)-102 of these regulations within thirty (30) days.

(12) Each notification required by this section shall be submitted on forms furnished or prescribed by the commissioner.

(13) Notices required to be submitted in accordance with subsection 22a-449 (d)-102 (b) of these regulations for tanks installed after December 22, 1988 shall also provide all of the information in section VII of the form as required in subsection 22a-449 (d)-109 (x) for each tank for which notice shall be given.

(14) All owners and operators of new UST systems shall certify in the notification form compliance with the following requirements:

(A) Installation of tanks and piping under subdivision 22a-449 (d)-102 (a) (8) of these regulations;

(B) Cathodic protection of steel tanks and piping under subdivisions 22a-449 (d)-102 (a) (1) and (3) of these regulations;

(C) Financial responsibility under section 22a-449 (d)-109 of these regulations; and

(D) Release detection under subsection 22a-449 (d)-104 (c) and (d) of these regulations.

(15) All owners and operators of new UST systems shall ensure that the installer certifies in the notification form that the methods used to install the tanks and piping complies with the requirements in subdivision 22a-449 (d)-102 (a) (6) of these regulations.

(16) Beginning October 24, 1988, any person who sells a tank intended to be used as an underground storage tank shall notify the purchaser of such tank of the owner's notification obligations under 40 CFR 280.22 (a). The form provided in subsection 22a-449 (d)-109 (z) of these regulations may be used to comply with this requirement.

(Effective July 28, 1994; amended May 31, 2012)

Sec. 22a-449 (d)-103. General operating requirements

(a) **Spill and overfill control.**

(1) Owners and operators shall ensure that releases due to spilling or overfilling do not occur. The owner and operator shall ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank before the

transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

(2) The owner and operator shall report, investigate, and clean up any spills and overfills in accordance with subsection 22a-449 (d)-105 (d) of these regulations.

(3) The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with subdivision 22a-449 (d)-103 (a) (1) of these regulations. Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, ''Recommended Practice for Bulk Liquid Stock Control at Retail Outlets,'' and National Fire Protection Association Standard 30, ''Flammable and Combustible Liquids Code.''

(b) **Operation and maintenance of corrosion protection.**

All owners and operators of steel UST systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for the operational life of the UST system:

(1) All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground.

(2) All UST systems equipped with cathodic protection systems shall be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(A) Frequency. All cathodic protection systems shall be tested within six months of installation and at least annually thereafter or according to another reasonable time frame established by the implementing agency; and

(B) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section shall be in accordance with a code of practice developed by a nationally recognized association. A structure to soil test voltage reading of a least minus 0.85 volts measured between the structure and a copper-copper sulfate electrode shall be maintained. Voltage drops other than those across the structure electrolyte boundary shall be considered for valid interpretation of the voltage measurements. Other cathodic protection criteria may be used upon written approval of the commissioner.

(3) UST systems with impressed current cathodic protection systems shall also be inspected every thirty days to ensure the equipment is running properly and a monthly record of rectifier current and voltage output shall be maintained in accordance with subsection 22a-449 (d)-103 (e) of these regulations.

(4) For UST systems using cathodic protection, records of the operation of the cathodic protection shall be maintained (in accordance with subsection 22a-449 (d)-103 (e) of these regulations) to demonstrate compliance with the performance standards in subsection 22a-449 (d)-103 (d) of these regulations. These records shall provide the following:

(A) The results of all inspections required in subdivision 22a-449 (d)-103 (b) (3) of these regulations; and

(B) The results of testing from all inspections required in subdivision 22a-449 (d)-103 (b) (2) of these regulations.

(5) If any cathodic protection system malfunctions or fails to meet the above structure to soil test voltage requirement, it shall be immediately repaired. Anodes shall be replaced when all other corrective measures which have been taken are not sufficient to maintain the structure to soil test voltage of at least minus 0.85 volts.

(6) National Association of Corrosion Engineers Standard RP-02-85, ''Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems,'' may be used to comply with subparagraph 22a-449 (d)-103 (b) (2) (B).

(c) **Compatibility.**

Owners and operators shall use an UST system made of or lined with materials that are compatible with the substance stored in the UST system.

(1) Owners and operators storing alcohol blends may use the following codes to comply with the requirements of this section:

(A) American Petroleum Institute Publication 1626, ''Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations''; and

(B) American Petroleum Institute Publication 1627, ''Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations.''

(d) **Repairs allowed.**

Owners and operators of UST systems shall ensure that repairs shall prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. The repairs shall meet the following requirements:

(1) Repairs to UST systems shall be properly conducted in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory provided that such codes and standards are no less stringent and protective than the requirement in NFPA 30.

(2) Repairs to fiberglass-reinforced plastic tanks may be made by the manufacturer's authorized representatives or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

(3) Metal pipe sections and fittings that have released product as a result of corrosion or other damage shall be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(4) Repaired tanks and piping shall be tightness tested in accordance with 22a-449 (d)-104 (e) (3) and subdivision 22a-449 (d)-104 (f) (2) of these regulations within thirty days following the date of the completion of the repair except as provided in subparagraphs 22a-449 (d)-103 (d) (1), (2), and (3) of these regulations:

(A) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; or

(B) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in 22a-449 (d)-104 (e) (4), (5), (6), and (7) of these regulations; or

(C) Another test method is used that is determined by prior written approval of the implementing agency to be no less protective of human health and the environment than those listed above.

(5) Within six months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with subdivisions 22a-449 (d)-103 (b) (2) and (3) of these regulations to ensure that it is operating properly.

(6) UST system owners and operators shall maintain records of each repair for the remaining operating life of the UST system that demonstrate compliance with the requirements of subsection 22a-449 (d)-103 (d) of these regulations.

(7) Repairs to UST systems shall be properly conducted in accordance with NFPA 30 and the performance standards in subsection 22a-449 (d)-102 (a) of these regulations.

(8) The following codes and standards may be used to comply with subdivision 22a-449 (d)-103 (d) (1) of these regulations. National Fire Protection Association Standard 30, ''Flammable and Combustible Liquids Code''; American Petroleum Institute Publication 2200, ''Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines''; American Petroleum Institute Publication 1631, ''Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks''; and National Leak Prevention Association Standard 631, ''Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection.''

(e) **Reporting and record keeping.**

Owners and operators of UST systems shall cooperate fully with inspections, monitoring and testing conducted by the implementing agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to section 9005 of Subtitle I of the Federal Resource Conservation and Recovery Act, as amended.

(1) Reporting. Owners and operators shall submit the following information to the implementing agency:

(A) Notification for all UST systems (subsection 22a-449 (d)-102 (b) of these regulations), which includes certification of installation for new UST systems (subdivision 22a-449 (d)-102 (a) (8) of these regulations),

(B) Reports of all releases including suspected releases (subsection 22a-449 (d)-105 (a) of these regulations), spills and overfills (subsection 22a-449 (d)-105 (d) of these regulations), and confirmed releases (subsection 22a-449 (d)-106 (c) of these regulations);

(C) Corrective actions planned or taken including initial abatement measures (subsection 22a-449 (d)-106 (d) of these regulations), initial site characterization (subsection 22a-449 (d)-106 (e) of these regulations), free product removal (subsection 22a-449 (d)-106 (f) of these regulations), investigation of soil and ground-water cleanup (subsection 22a-449 (d)-106 (h) of these regulations), and corrective action plan (subsection 22a-449 (d)-106 (i) of these regulations); and

(D) A notification before permanent closure or change-in-service (subsection 22a-449 (d)-107 (b) of these regulations).

(E) An owner or operator of an UST system shall report any failure to the commissioner immediately, in accordance with section 22a-450 of the general statutes, as amended.

(2) Record keeping. Owners and operators shall maintain the following information:

(A) Documentation of operation of corrosion protection equipment (subsection 22a-449 (d)-103 (b) of these regulations).

(B) Documentation of UST system repairs (subdivision 22a-449 (d)-103 (d) (6) of these regulations);

(C) Recent compliance with release detection requirements (subsection 22a-449 (d)-104 (g) of these regulations);

(D) Results of the site investigation conducted at permanent closure (subsection 22a-449 (d)-107 (e) of these regulations);

(E) Documentation of compliance with the requirements in subdivision 22a-449 (d)-102 (a) (9) of these regulations.

(3) The owner or operator of an UST system shall assure the maintenance of up-to-date records of significant construction or installation activities; monitoring; substantial modifications; abandonment, removal, or replacement of UST system components or protective devices for such components; and any other activity required by an order of the commissioner. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following the completion of the recorded activity.

(4) Availability and Maintenance of Records. Owners and operators shall keep and maintain the records required by these regulations for at least five years beyond the operational life of the UST system either:

(A) At the UST site and immediately available for inspection by the implementing agency; or

(B) For records greater than five (5) years old or with prior written approval by the commissioner at a readily available alternative site and be immediately provided for inspection to the implementing agency upon request.

(Effective July 28, 1994)

Sec. 22a-449 (d)-104. Release detection

(a) **General requirements for all UST systems.**

(1) Owners and operators of new and existing UST systems shall provide a method, or combination of methods, of release detection that:

(A) Can detect a release from any portion of the tank and the connected underground piping except vent and vapor recovery piping unless such vent and vapor recovery piping routinely contains product;

(B) Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition; and

(C) Meets the performance requirements in subsections 22a-449 (d)-104 (e) or (f) of these regulations, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, methods used after the date shown in the following table corresponding with the specified method except for methods permanently installed prior to that date, shall be capable of detecting the leak rate or quantity specified for that method in the corresponding section of the rule (also shown in the table) with a probability of detection (Pd) of 0.95 and a probability of false alarm (Pfa) of 0.05.

Method	Subdivision of this section 22a-449 (d)-104	Date after which Pd/Pfa must be demonstrated
Manual Tank Gauging	(e) (2)	December 22, 1990.
Tank Tightness Testing	(e) (2)	December 22, 1990.
Automatic Tank Gauging	(e) (4)	December 22, 1990.
Automatic Line Leak Detectors	(f) (1)	September 22, 1991.
Line Tightness Testing	(f) (2)	December 22, 1990.

(2) When a release detection method operated in accordance with the performance standards in subsections 22a-449 (d)-104 (e) and (f) of these regulations indicates a release may have occurred, owners and operators shall notify the implementing agency in accordance with section 22a-449 (d)-105 of these regulations.

(3) Owners and operators of all UST systems shall comply with the release detection requirements of section 22a-449 (d)-104 of these regulations by December 22 of the year listed in the following table:

Schedule for Phase-in of Release Detection

Year system was installed	*Year when release detection is required (by December 22nd of the year indicated)*				
	1989	1990	1991	1992	1993
Before 1965 or date unknown	RD	P			
1965-69		P/RD			
1970-74		P	RD		
1975-79		P		RD	
1980-88		P			RD
New tanks (after December 22) immediately upon installation.					

P = Shall begin release detection for all pressurized piping as defined in subdivision 22a-449 (d)-104 (c) (2) (A) of these regulations.

RD = Shall begin release detection for tanks and suction piping in accordance with subdivisions 22a-449 (d)-104 (c) (1), (c) (2) (B) and subsection 22a-449 (d)-104 (d) of these regulations.

(4) Any existing UST system that cannot apply a method of release detection that complies with the requirements of section 22a-449 (d)-104 of these regulations shall complete the closure procedures in section 22a-449 (d)-107 of these regulations by the date on which release detection is required for that UST system under subdivision 22a-449 (d)-104 (a) (3) of these regulations.

(b) **Additional Requirements**

(1) Failure determination. On and after the effective date of RCSA section 22a-449 (d)-104 the owner and operator of an UST system which was regulated under RCSA section 22a-449 (d)-1 prior to the effective date of these regulations, shall perform and report failure determinations in accordance with RCSA section 22a-449 (d)-1 until the date that release detection is provided and performed in accordance with all the requirements in subsection 22a-449 (d)-104 (c) of these regulations including any tightness testing that is required thereunder.

(2) Tank tightness test. In addition to the tank testing requirements in these regulations, the owner or operator of a fiberglass-reinforced plastic UST system shall conduct a tank tightness test in accordance with subdivision 22a-449 (d)-104 (e) (3) of these regulations within three to six months after the installation of such system.

(3) Inventory.

(A) On and after the effective date of RCSA section 22a-449 (d)-104 the owner and operator of an UST system which was regulated under RCSA section 22a-449 (d)-1 prior to the effective date of these regulations, shall perform and maintain daily inventory records in accordance with RCSA section 22a-449 (d)-1 including, but not limited to, the confirmation and reporting of an abnormal loss or gain until the date that release detection is provided and performed in accordance with all the requirements in subsection 22a-449 (d)-104 (c) of these regulations including any monthly inventory control that is required thereunder.

(B) The commissioner may require an owner or operator to perform a failure determination, in accordance with RCSA section 22a-449 (d)-1, of any UST system for which daily inventory records are not maintained in accordance with this subdivision.

(c) **Requirements for petroleum UST systems.**

Owners and operators of petroleum UST systems shall provide release detection for tanks and piping as follows:

(1) Tanks. Daily measurements for any water level in the bottom of the tank shall be made to the nearest one-eighth of an inch and recorded, except such measurements for water are not required for double wall tanks with interstitial monitoring performed in accordance with section 22a-449 (d)-104 these regulations. Tanks shall be monitored at least every thirty (30) days for releases using one of the methods listed in subdivisions 22a-449 (d)-104 (e) (4), (5), (6), (7) and (8) of these regulations except that:

(A) UST systems that meet the performance standards in subsection 22a-449 (d)-102 (a) of these regulations and the monthly inventory control requirements in subdivisions 22a-449 (d)-104 (e) (1) or (2) of these regulations may use tank tightness testing, conducted in accordance with subdivision 22a-449 (d)-104 (e) (3) at least every five years and at thirty-six to thirty-three months prior to the end of their life expectancy and annually thereafter until December 22, 1998, or until ten years after the tank is installed, whichever is later;

(B) UST systems that do not meet the performance standards in subsection 22a-449 (d)-102 (a) of these regulations may use monthly inventory controls, conducted in accordance with subdivisions 22a-449 (d)-104 (e) (1) or (2) of these regulations, and annual tank tightness testing, conducted in accordance with subdivision 22a-449 (d)-104 (e) (3) of these regulations, until the closure date specified in subsections 22a-449 (d)-110 (a) and (b) of these regulations for that UST system or December 22, 1998, whichever date is earlier.

(C) Tanks with capacity of 550 gallons or less may use weekly tank gauging, conducted in accordance with subdivision 22a-449 (d)-104 (e) (2) of these regulations.

(2) Piping. Underground piping that routinely contains regulated substances shall be monitored for releases in a manner that meets one of the following requirements:

(A) Pressurized piping. Underground piping that conveys regulated substances under pressure shall:

(i) Be equipped with an automatic line leak detector conducted in accordance with subdivision 22a-449 (d)-104 (f) (1) of these regulations; and

(ii) Have an annual line tightness test conducted in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations or have monthly monitoring conducted in accordance with subdivision 22a-449 (d)-104 (f) (3) of these regulations.

(B) Suction piping. Underground piping that conveys regulated substances under suction shall either have a line tightness test conducted at least every three years until thirty-six to thirty-three months prior to the end of their life expectancy, on which date and annually thereafter line tightness tests shall be conducted, and all such line tightness tests shall be conducted and in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations, or use a monthly monitoring method conduct in accordance with subdivision 22a-449 (d)-104 (f) (3) of these regulations. For suction piping that is designed and constructed to meet the following standards, a line tightness test shall be conducted thirty-six to thirty-three months prior to the end of their life expectancy and annually thereafter and such line tightness shall be conducted in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations:

(i) The below-grade piping operates at less than atmospheric pressure;

(ii) The below-grade piping is sloped so that the contents of the pipe shall drain back into the storage tank if the suction is released;

(iii) Only one check valve is included in each suction line;

(iv) The check valve is located directly below and as close as practical to the suction pump; and

(v) A method is provided that allows compliance with subparagraphs 22a-449 (d)-104 (c) (2) (B) (ii), (iii) and (iv) of these regulations of this section to be readily determined.

(d) **Requirements for hazardous substance UST systems.**

Owners and operators of hazardous substance UST systems shall provide release detection that meets the following requirements:

(1) Release detection at existing UST systems shall meet the requirements for petroleum UST systems in subsection 22a-449 (d)-104 (c) of these regulations. By December 22, 1998, all existing hazardous substance UST systems shall meet the release detection requirements for new systems in subdivision 22a-449 (d)-104 (d) (2) of these regulations.

(2) Release detection at new hazardous substance UST systems shall meet the following requirements:

(A) Secondary containment systems shall be designed, constructed and installed to:

(i) Contain regulated substances released from the tank system until they are detected and removed;

(ii) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system; and

(iii) Be checked for evidence of a release at least every thirty days.

(B) Double-walled tanks shall be designed, constructed, and installed to:

(i) Contain a release from any portion of the inner tank within the outer wall; and

(ii) Detect the failure of the inner wall.

(C) External liners (including vaults) shall be designed, constructed, and installed to:

(i) Contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Prevent the interference of precipitation or ground-water intrusion with the ability to contain or detect a release of regulated substances; and

(iii) Surround the tank completely so that it is capable of preventing lateral as well as vertical migration of regulated substances.

(D) Underground piping shall be equipped with secondary containment that satisfies the requirements of subdivision 22a-449 (d)-104 (d) (2) (A) of these regulations, including, but not limited to, trench liners and jacketing of double-walled pipe. In addition, underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with subdivision 22a-449 (d)-104 (f) (1) of these regulations.

(E) Other methods of release detection may be used if owners and operators:

(i) Demonstrate to the implementing agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in subdivisions 22a-449 (d)-104 (e) (2) to (8), inclusive, of these regulations can detect a release of petroleum;

(ii) Provide information to the implementing agency on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site; and,

(iii) Obtain prior written approval from the implementing agency to use the alternate release detection method before the installation and operation of the new UST system.

(F) The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements of subdivision 22a-449 (d)-104 (d) (2) of these regulations.

(e) **Methods of release detection for tanks.**

Each method of release detection for tanks used to meet the requirements of subsection 22a-449 (d)-104 (c) of these regulations shall be conducted in accordance with the following:

(1) Inventory control. The owner or operator of an UST system shall assure that the following information is recorded: on a daily basis, the amount of regulated substances sold, used and received, and the level of water and product in the tank or container; and on a weekly basis, a reconciliation comparing these figures to determine whether an abnormal loss or gain has occurred. Separate records shall be maintained for each system of interconnected tanks or containers and serving pumps or dispensers. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following their recording. Inventory control shall also be conducted in the following manner:

(A) The equipment used is capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch;

(B) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;

(C) Deliveries are made through a drop tube that extends to within one foot of the tank bottom;

(D) Product dispensing is metered and recorded within the local standards for meter calibration or an accuracy of 6 cubic inches for every 5 gallons of product withdrawn, except that if the local standards for meter calibration is more stringent than an accuracy of 6 cubic inches for every 5 gallons of product withdrawn, the product dispensing shall be calibrated to the local standards; and

(E) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a day.

(F) The commissioner may require an owner or operator to perform a tank and line tightness test in accordance with subdivisions 22a-449 (d)-104 (e) (3) and (f) (2) of these regulations of any UST system for which daily inventory records are not maintained in accordance with the requirements in these regulations;

(G) When inventory reconciliation indicates an abnormal loss or gain which is not explainable by spillage, temperature variations or other known causes, the owner or operator shall assure the immediate investigation and correction of the source of the abnormal loss or gain. At a minimum, the owner or operator shall take as many of the steps listed below in subparagraph (i), (ii), and (iii) as necessary to confirm an abnormal loss or gain. In addition, if an abnormal loss or gain is measured during a weekly reconciliation and there were four (4) consecutive days of loss or four (4) consecutive days of gain during the ten (10) day period prior to reconciliation, or abnormal losses or abnormal gains are measured during two consecutive weekly reconciliations, the owner or operator shall take as many of the steps listed below in subparagraph (iv), (v), and (vi) as necessary to confirm an abnormal loss or gain.

(i) When an inventory record error is not apparent, a recalculation to determine abnormal loss or gain shall be made starting from a point where records indicate no abnormal loss or gain;

(ii) A detailed visual inspection of these components of the facility which are readily accessible for evidence of failure shall be performed;

(iii) The dispensers of the particular regulated substances in question shall be checked for proper calibration;

(iv) A line tightness test shall be performed on the piping system between the storage tank or container and dispenser(s) in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations;

(v) A tank tightness test shall be performed on all other piping attached to the tank in accordance with subdivision 22a-449 (d)-104 (e) (3) of these regulations; and

(iv) A line tightness test shall be performed on all other piping attached to the tank in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations.

(H) When an abnormal loss or gain is confirmed, the owner or operator shall immediately report the abnormal loss or gain to the commissioner in accordance with Section 22a-450 of the General Statutes as amended.

(I) Practices described in the American Petroleum Institute Publication 1621, ''Recommended Practice for Bulk Liquid Stock Control at Retail Outlets,'' may be used, where applicable, as guidance in meeting the requirements of subdivision 22a-449 (d)-104 (e) (1) of these regulations.

(2) Manual tank gauging. Manual tank gauging shall meet the following requirements:

(A) Tank liquid level measurements are taken and recorded, including date and time of measurements, at the beginning and ending of a period of at least 36 hours during which no liquid is added to or removed from the tank;

(B) Level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period;

(C) The equipment used is capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch;

(D) A leak is suspected and subject to the requirements of section 22a-449 (d)-105 of these regulations if the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table:

Nominal tank capacity	*Weekly standard (one test)*	*Monthly standard (average of four tests)*
550 gallons or less	10 gallons	5 gallons.
551-1,000 gallons	13 gallons	7 gallons.
1,001-2,000 gallons	26 gallons	13 gallons.

(E) Only tanks of 550 gallons or less nominal capacity may use this as the sole method of release detection. Tanks of 551 to 2,000 gallons may use the method in place of manual inventory control in subdivision 22a-449 (d)-104 (e) (1) of these regulations except that this method shall not be used for compliance with the requirements in subdivision 22a-449 (d)-104 (e) (4) (B) of these regulations. Tanks of greater than 2,000 gallons nominal capacity shall not use this method to meet the requirements of section 22a-449 (d)-104 of these regulations;

(F) Daily measurements are taken for any water level in the bottom of the tank to the nearest one eighth of an inch except such measurement for water shall not be required for double wall tanks with interstitial monitoring performed in accordance with subsection 22a-449 (d)-104 (e) of these regulations.

(3) Tank tightness testing. Tank tightness testing or another test of equivalent performance shall be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank while accounting for the effects of thermal expansion or contrac-

tion of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(4) Automatic tank gauging. Equipment for automatic tank gauging that tests for the loss of product and conducts inventory control shall meet the following requirements:

(A) The automatic product level monitor test can detect a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains product; and

(B) Inventory control or another test of equivalent performance is conducted in accordance with the requirements of subdivision 22a-449 (d)-104 (e) (1) of these regulations.

(5) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

(A) The materials used as backfill are sufficiently porous, including, but not limited to, gravel, sand and crushed rock to readily allow diffusion of vapors from releases into the excavation area;

(B) The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile, including, but not limited to, gasoline, to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

(C) The measurement of vapors by the monitoring device is not rendered inoperative by the ground water, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than 30 days;

(D) The level of background contamination in the excavation zone shall not interfere with the method used to detect releases from the tank;

(E) The vapor monitors are designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system;

(F) In the UST excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs 22a-449 (d)-104 (e) (5) (A), (B), (C), and (D) of these regulations and to establish the number and positioning of monitoring wells that shall detect releases within the excavation zone from any portion of the tank that routinely contains product; and

(G) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(6) Groundwater monitoring. Testing or monitoring for liquids on the ground water shall meet the following requirements:

(A) The regulated substance stored is immiscible in water and has a specific gravity of less than one;

(B) Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec. The soil shall be a permeable material, including, but not limited to, gravels, coarse to medium sands, coarse silts or other permeable materials;

(C) The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions;

(D) Monitoring wells shall be sealed from the ground surface to the top of the filter pack;

(E) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;

(F) The continuous monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the ground water in the monitoring wells;

(G) Within and immediately below the UST system excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs 22a-449 (d)-104 (e) (6) (A), (B), (C), (D), and (E) of these regulations and to establish the number and positioning of monitoring wells or devices that shall detect releases from any portion of the tank that routinely contains product; and

(H) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering; and

(I) Groundwater samples shall be obtained monthly from each monitoring well and checked by visual and vapor testing methods to determine the presence of a release.

(7) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains product and also meets one of the following requirements:

(A) For double-walled UST systems, the sampling or testing method can detect a release through the inner wall in any portion of the tank that routinely contains product;

(i) The provisions outlined in the Steel Tank Institute's ''Standard for Dual Wall Underground Storage Tanks'' may be used as guidance for aspects of the design and construction of underground steel double-walled tanks.

(B) For UST systems with a secondary barrier within the excavation zone, the sampling or testing method used can detect a release between the UST system and the secondary barrier;

(i) The secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least 10^{-6} m/sec for the regulated substance stored) to direct a release to the monitoring point and permit its detection;

(ii) The barrier is compatible with the regulated substance stored so that a release from the UST system shall not cause a deterioration of the barrier allowing a release to pass through undetected;

(iii) For cathodically protected tanks, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system;

(iv) The ground water, soil moisture, or rainfall shall not render the testing or sampling method used inoperative so that a release could go undetected for more than 30 days;

(v) The site is assessed to ensure that the secondary barrier is always above the ground water and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and,

(vi) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(C) For tanks with an internally fitted liner, an automated device can detect a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored.

(8) Other methods. Any other type of release detection method, or combination of methods, can be used if the implementing agency gives prior, written approval including any conditions as deemed necessary and if:

(A) It can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05; or

(B) The implementing agency may approve another method if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subdivisions 22a-449 (d)-104 (e) (3), (4), (5), (6), (7) and (8) of these regulations. In comparing methods, the implementing agency shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and operator shall comply with any conditions imposed by the implementing agency on its use to ensure the protection of human health and the environment.

(f) **Methods of release detection for piping.**

Each method of release detection for piping used to meet the requirements of subsection 22a-449 (d)-104 (c) of these regulations shall be conducted in accordance with the following:

(1) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements.

(2) Line tightness testing. A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure.

(3) Applicable tank methods. Any of the methods in subdivisions 22a-449 (d)-104 (e) (5), (6), (7) and (8) of these regulations may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

(g) **Release detection recordkeeping.**

All UST system owners and operators shall maintain records in accordance with subsection 22a-449 (d)-103 (e) of these regulations demonstrating compliance with all applicable requirements of section 22a-449 (d)-104 of these regulations. These records shall include the following:

(1) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, shall be maintained for 5 years beyond the operational life of the UST system;

(2) The results of any sampling, testing, or monitoring shall be maintained for at least 5 years beyond the operational life of the UST system; and

(3) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site shall be maintained for at least 5 years beyond the operational life of the UST system. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be retained for 5 years beyond the operational life of the UST system.

(Effective July 28, 1994)

Sec. 22a-449 (d)-105. Release reporting, investigation, and confirmation

(a) **Reporting of suspected releases.**

Owners and operators of UST systems shall report to the implementing agency within 24 hours, or any time period provided under applicable law, including, but not limited to, section 22a-450 of the general statutes, as amended and any

implementing regulations, whichever is earliest, and follow the procedures in subsection 22a-449 (d)-105 (c) of these regulations for any of the following conditions:

(1) The discovery by owners and operators or others of released regulated substances at the UST site or in the surrounding area including, but not limited to, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water.

(2) Unusual operating conditions observed by owners and operators, including, but not limited to, the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, or an unexplained presence of water in the tank, unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced; and,

(3) Monitoring results from a release detection method required under subsections 22a-449 (d)-104 (c) and (d) of these regulations that indicate a release may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result;

(4) The owner or operator of UST systems shall submit a written report to the commissioner within 3 working days of a release including, but not limited to, estimated amount of product lost, location of release and identification of leaking components of the UST system.

(b) **Investigation due to off-site impacts.**

When required by the implementing agency, owners and operators of UST systems shall follow the procedures in subsections 22a-449 (d)-105 (c) of these regulations to determine if the UST system is the source of off-site impacts. These impacts include the discovery of regulated substances including, but not limited to, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters that has been observed by the implementing agency or brought to its attention by another party.

(c) **Release investigation and confirmation steps.**

Unless corrective action is initiated in accordance with section 22a-449 (d)-106 of these regulations, owners and operators shall immediately investigate and confirm all suspected releases of regulated substances requiring reporting under subsections 22a-449 (d)-105 (a) of these regulations within 7 days, or another time period specified in writing by the implementing agency, using either the following steps or another procedure given prior written approval by the implementing agency:

(1) System test. Owners and operators shall conduct tests according to the requirements for tightness testing in subdivisions 22a-449 (d)-104 (e) (3) and (f) (2) of these regulations that determine whether a leak exists in any portion of the tank, or the attached piping other than vent and vapor recovery piping that does not routinely contain product unless the commissioner requests that such piping be tested, or any combination of such tank and piping.

(A) Owners and operators shall repair, replace or upgrade the UST system, and begin corrective action in accordance with section 22a-449 (d)-106 of these regulations if the test results for the system, tank, or delivery piping indicate that a leak exists.

(B) Further investigation shall not be required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release.

(C) Owners and operators shall conduct a site check as described in subdivision 22a-449 (d)-105 (c) (2) of these regulations if the test results for the system, tank,

and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Owners and operators shall measure for the presence of a release where contamination is most likely to be present at the UST site and such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. In selecting sample types, sample locations, and measurement methods, owners and operators shall consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth of ground water, and other factors appropriate for identifying the presence and source of the release. Sample collection and analysis shall comply with the appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the Connecticut Department of Health Services to perform such analyses.

(A) If the test results for the excavation zone or the UST site indicate that a release has occurred, owners and operators shall begin corrective action in accordance with section 22a-449 (d)-106 of these regulations;

(B) If the test results for the excavation zone or the UST site do not indicate that a release has occurred, further investigation shall not be required.

(d) **Reporting and cleanup of spills and overfills.**

(1) Owners and operators of UST systems shall immediately contain and immediately clean up a spill or overfill and report to the implementing agency within 24 hours, or any time period provided under applicable law including, but not limited to, section 22a-450 of the general statutes, as amended, and any implementing regulations, whichever is earliest, and begin corrective action in accordance with section 22a-449 (d)-106 of these regulations in the following cases:

(A) Spill or overfill of petroleum that results in a release to the environment, and

(B) Spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR part 302).

(2) Owners and operators of UST systems shall immediately contain and immediately clean up a spill or overfill of a hazardous substance that is less than the reportable quantity. If cleanup cannot be accomplished within 24 hours, or another time period established in writing by the implementing agency, owners and operators shall immediately notify the implementing agency.

(3) Pursuant to 40 CFR sections 302.6 and 355.40, a release of a hazardous substance equal to or in excess of its reportable quantity shall also be reported immediately (rather than within 24 hours) to the National Response Center under sections 102 and 103 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and to appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986.

(Effective July 28, 1994)

Sec. 22a-449 (d)-106. Release response and corrective action for UST systems containing petroleum or hazardous substances

(a) **General.**

Owners and operators of petroleum or hazardous substance UST systems shall, in response to a confirmed release from the UST system, comply with the requirements of this section except for USTs excluded under subdivision 22a-449 (d)-101 (a) (2) of these regulations and UST systems subject to the Resource Conservation

and Recovery Act Subtitle C corrective action requirements under section 3004 (u) of the Resource Conservation and Recovery Act, as amended.

(b) **Additional Requirements.**

The following requirements shall apply in addition to those in this section:

(1) Discharges prohibited. No owner or operator shall discharge any water, substance or material, including, but not limited to, regulated substances, from any UST system to the waters of the state without first obtaining a permit for such discharge pursuant to section 22a-430 of the general statutes, as amended.

(2) Corrective action. The owner or operator of an UST system which discharges regulated substances without a permit issued pursuant to section 22a-430 of the general statutes, as amended, shall immediately cease such discharge and reclaim, recover and properly dispose of the discharged liquid and any other substance contaminated by it, restore the environment to a condition and quality acceptable to the commissioner, and repair damage caused by the discharge, and comply with the requirements in subdivision 22a-449 (d)-106 (d) (1) and (b) (3) of these regulations, all to the satisfaction of the commissioner.

(3) Failures.

(A) The owner or operator of an UST system at which a failure occurs shall immediately empty and discontinue the use of the failed component and:

(i) Remove or abandon it within ninety days in accordance with the applicable procedures in NFPA 30 and in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations; or

(ii) Repair it within sixty days in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations; or

(iii) Replace all damaged components in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations.

(B) When a failure occurs at an UST system, all of such UST system's components shall be evaluated within thirty days to determine whether similar conditions to that which caused the failure exist. Within ten (10) days following such evaluation, the owner or operator shall notify the commissioner in writing of the methods and results of each such evaluation. If an additional failure is detected, the owner or operator shall act in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations.

(c) **Initial response.**

Upon confirmation of a release in accordance with subsection 22a-449 (d)-105 (c) of these regulations or after a release from the UST system is identified in any other manner, owners and operators shall perform the following initial response actions within 24 hours of a release or within another reasonable period of time determined by applicable law or the implementing agency:

(1) Report the release to the implementing agency by telephone, or electronic mail; and notify the appropriate emergency fire response and public safety and health personnel;

(2) Take immediate action to prevent any further release of the regulated substance into the environment including emptying and discontinuing use of any leaking UST system component and any UST system component which has been subject to a failure; and

(3) Identify and mitigate fire, explosion, and vapor hazards.

(d) **Initial abatement measures and site check.**

(1) Unless directed in writing to do otherwise by the implementing agency, owners and operators shall perform the following abatement measures:

(A) Remove all of the regulated substance from the UST system to prevent further release to the environment;

(B) Visually inspect any aboveground releases or exposed belowground releases and prevent further migration of the released substance into surrounding soils and ground water;

(C) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures including, but not limited to, sewers or basements;

(D) Remedy hazards posed by contaminated soils and other materials that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the owner and operator shall comply with applicable State and local requirements;

(E) Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with the site check required by subdivision 22a-449 (d)-105 (c) (2) of these regulations or the closure site assessment of subdivision 22a-449 (d)-107 (c) (1) of these regulations. Such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the department of public health and addiction services to perform such analyses. In selecting sample types, sample locations, and measurement methods, the owner and operator shall consider the nature of the stored substance, the type of backfill, depth to ground water and other factors as appropriate for identifying the presence and source of the release; and

(F) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with subsection 22a-449 (d)-106 (f) of these regulations.

(2) Within 20 days after release confirmation, or within another reasonable period of time specified in writing by the implementing agency, owners and operators shall submit a report to the implementing agency summarizing the initial abatement steps taken under subdivision 22a-449 (d)-106 (d) (1) of these regulations and any resulting information or data.

(e) **Initial site characterization.**

(1) Unless directed in writing to do otherwise by the implementing agency, owners and operators shall assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in subsections 22a-449 (d)-106 (a) and (c) of these regulations. This information shall include, but shall not necessarily be limited to the following:

(A) Data on the nature and estimated quantity of release;

(B) Data from available sources and/or site investigations concerning the following factors: surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use;

(C) Results of the site check required under subdivision 22a-449 (d)-106 (d) (1) (E) of these regulations; and

(D) Results of the free product investigations required under subdivision 22a-449 (d)-106 (d) (1) (F) of these regulations, to be used by owners and operators to determine whether free product shall be recovered under subsection 22a-449 (d)-106 (f).

(2) Within 45 days of release confirmation or another reasonable period of time specified in writing by the implementing agency, owners and operators shall submit the information collected in compliance with subdivision 22a-449 (d)-106 (e) (1) of these regulations to the implementing agency in a manner that demonstrates its applicability and technical adequacy, or in a format and according to the schedule required by the implementing agency.

(f) **Free product removal.**

At sites where investigations under subdivision 22a-449 (d)-106 (d) (1) (F) of these regulations indicate the presence of free product, owners and operators shall remove free product to the maximum extent practicable as determined by the implementing agency while continuing, as necessary, any actions initiated under subsections 22a-449 (d)-106 (c), (d) and (e) of these regulations, or preparing for actions required under subsections 22a-449 (d)-106 (g) and (h) of these regulations. In meeting the requirements of this section, owners and operators shall:

(1) Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, State and Federal regulations;

(2) Use abatement of free product migration as a minimum objective for the design of the free product removal system;

(3) Handle any flammable products in a safe and competent manner to prevent fires or explosions; and

(4) Unless directed in writing to do otherwise by the implementing agency, prepare and submit to the implementing agency, within 45 days after confirming a release, a free product removal report that provides at least the following information:

(A) The name of the person(s) responsible for implementing the free product removal measures;

(B) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(C) The type of free product recovery system used;

(D) Whether any discharge shall take place on-site or off-site during the recovery operation and where this discharge shall be located;

(E) The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps that have been or are being taken to obtain necessary permits for any discharge; and

(G) The disposition of the recovered free product.

(g) **Investigations for soil and ground-water cleanup.**

(1) In order to determine the full extent and location of soils contaminated by the release and the presence and concentrations of dissolved product contamination in the ground water, owners and operators shall conduct investigations of the release, the release site, and the surrounding area possibly affected by the release if any of the following conditions exist:

(A) There is evidence that ground-water wells have been affected by the release, including, but not limited to, evidence found during release confirmation or during previous corrective action measures;

(B) Free product is found to need recovery in compliance with subsection 22a-449 (d)-106 (f) of these regulations;

(C) There is evidence that contaminated soils may be in contact with ground water, including, but not limited to, evidence found during conduct of the initial response measures or investigations required under subsections 22a-449 (d)-106 (a), (c), (d), (e) and (f) of these regulations; and

(D) The implementing agency requests an investigation, based on the potential effects of contaminated soil or ground water on nearby surface water and groundwater resources.

(2) Owners and operators shall submit the information collected under subdivision 22a-449 (d)-106 (g) (1) of these regulations as soon as practicable or in accordance with a schedule established by the implementing agency.

(h) **Corrective action plan.**

(1) At any point after reviewing the information submitted in compliance with subsections 22a-449 (d)-106 (c), (d), and (e) of these regulations implementing agency may require owners and operators to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and ground water. If a plan is required, owners and operators shall submit the plan according to a schedule and format established by the implementing agency. Alternatively, owners and operators may, after fulfilling the requirements of subsections 22a-449 (d)-106 (c), (d) and (e) of these regulations, choose to submit a corrective action plan for responding to contaminated soil and ground water. In either case, owners and operators are responsible for submitting a plan that provides for adequate protection of human health and the environment as determined by the implementing agency, and shall modify their plan as necessary to meet this standard.

(2) The implementing agency shall approve the corrective action plan only after ensuring that implementation of the plan shall adequately protect human health, safety, and the environment. In making this determination, the implementing agency shall consider the following factors as appropriate:

(A) The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;

(B) The hydrogeologic characteristics of the facility and the surrounding area;

(C) The proximity, quality, and current and future uses of nearby surface water and ground water;

(D) The potential effects of residual contamination on nearby surface water and ground water;

(E) An exposure assessment; and

(F) Any information assembled in compliance with section 22a-449 (d)-106 of these regulations.

(3) Upon approval of the corrective action plan or as directed by the implementing agency, owners and operators shall implement the plan, including modifications to the plan made by the implementing agency. They shall monitor, evaluate, and report the results of implementing the plan in accordance with a schedule and in a format established by the implementing agency.

(4) Owners and operators may, in the interest of minimizing environmental contamination and promoting more effective cleanup, begin cleanup of soil and ground water before the corrective action plan is approved provided that they:

(A) Notify the implementing agency of their intention to begin cleanup;

(B) Comply with any conditions imposed by the implementing agency, including halting cleanup or mitigating adverse consequences from cleanup activities; and

(C) Incorporate these self-initiated cleanup measures in the corrective action plan that is submitted to the implementing agency for approval.

(i) **Public participation.**

(1) For each confirmed release that requires a corrective action plan, the implementing agency shall provide notice to the public by means designed to reach those members of the public directly affected by the release and the planned corrective action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, publication in a state register, letters to individual households, or personal contacts by field staff.

(2) The implementing agency shall ensure that site release information and decisions concerning the corrective action plan are made available to the public for inspection upon request.

(3) Before approving a corrective action plan, the implementing agency may hold a public meeting to consider comments on the proposed corrective action plan if there is sufficient public interest, or for any other reason.

(4) The implementing agency shall give public notice that complies with subdivision 22a-449 (d)-106 (i) (1) of these regulations if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the implementing agency.

(Effective July 28, 1994)

Sec. 22a-449 (d)-107. Out-of-service UST systems and closure

(a) **Temporary closure.**

(1) When an UST system is temporarily closed, owners and operators shall continue operation and maintenance of corrosion protection in accordance with subsections 22a-449 (d)-103 (b) of these regulations, and any release detection in accordance with section 22a-449 (d)-104 of these regulations. Section 22a-449 (d)-105 and section 22a-449 (d)-106 of these regulations shall be complied with if a release is suspected or confirmed. However, release detection other than monthly measurement recording for residue and water level in the UST system in accordance with section 22a-449 (d)-104 of these regulations shall not be required as long as the UST system is empty and has never been subject to a failure. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system.

(2) When an UST system is temporarily closed for 3 months or more, owners and operators shall also comply with the following requirements:

(A) Leave vent lines open and functioning; and

(B) Cap and secure all other lines, pumps, manways, and ancillary equipment.

(3) When an UST system is temporarily closed for more than 12 months, owners and operators shall permanently close the UST system if it does not meet either performance standards in subsection 22a-449 (d)-102 (a) of these regulations for new UST systems or the upgrading requirements in section 22a-449 (d)-110 of these regulations, except that the spill and overfill equipment requirements do not have to be met. Owners and operators shall permanently close the substandard UST systems at the end of this 12-month period in accordance with subsections 22a-449 (d)-107 (b), (c), (d) and (e) of these regulations, unless the implementing agency provides prior written approval for extension of the 12-month temporary closure period. Owners and operators shall complete a site assessment in accordance with subsection 22a-449 (d)-107 (c) of these regulations before such an extension can be applied for.

(b) **Permanent closure.**

(1) At least 30 days before beginning permanent closure under subdivision 22a-449 (d)-107 (b) (2) of these regulations, or within another reasonable time period determined in writing by the implementing agency, owners and operators shall notify the implementing agency of their intent to permanently close, unless such action is in response to corrective action. The required assessment of the excavation zone under subsection 22a-449 (d)-107 (c) of these regulations shall be performed after notifying the implementing agency but before completion of the permanent closure.

(2) To permanently close an UST system, owners and operators shall comply with NFPA 30 and empty and clean it by removing all liquids and accumulated sludges. All UST systems taken out of service permanently shall also be either removed from the ground or filled with an inert solid material.

(3) The following cleaning and closure procedures may be used to comply with subsection 22a-449 (d)-107 (b) of these regulations:

(A) American Petroleum Institute Recommended Practice 1604, ''Removal and Disposal of Used Underground Petroleum Storage Tanks'';

(B) American Petroleum Institute Publication 2015, ''Cleaning Petroleum Storage Tanks'';

(C) American Petroleum Institute Recommended Practice 1631, ''Interior Lining of Underground Storage Tanks,'' may be used as guidance for compliance with this section; and

(D) The National Institute for Occupational Safety and Health ''Criteria for a Recommended Standard * * * Working in Confined Space'' may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.

(c) **Assessing the site at closure.**

(1) Before permanent closure is completed, owners and operators shall measure for the presence of a release where contamination is most likely to be present at the UST site. Such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. In selecting sample types, sample locations, and measurement methods, owners and operators shall consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release. Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the Connecticut Department of Health Services to perform such analyses. The requirements of this section are satisfied if one of the external release detection methods allowed in subdivisions 22a-449 (d)-104 (e) (5) and (6) of these regulations is operating in accordance with the requirements in subsection 22a-449 (d)-104 (e) of these regulations at the time of closure and has been and is in compliance with section 22a-449 (d)-104 of these regulations, and indicates no release has occurred.

(2) If contaminated soils, contaminated ground water, or free product as a liquid or vapor is discovered under subdivision 22a-449 (d)-107 (c) (1) of these regulations, or by any other manner, owners and operators shall begin corrective action in accordance with section 22a-449 (d)-106 of these regulations.

(d) **Applicability to previously closed UST systems.**

When directed by the implementing agency, the owner and operator of an UST system permanently closed before December 22, 1988 shall assess the excavation zone and close the UST system in accordance with this subsection if releases from the UST may, in the judgment of the implementing agency, pose a current or potential threat to human health and the environment, or if, in the judgement of the implementing agency, the owner or operator of the UST system has violated any of the requirements in these regulations.

(e) **Closure records.**

Owners and operators shall maintain records in accordance with subsection 22a-449 (d)-103 (e) of these regulations that are capable of demonstrating compliance with closure requirements under section 22a-449 (d)-107 of these regulations. The results of the excavation zone assessment required in subsection 22a-449 (d)-107 (e) of these regulations shall be maintained for at least 5 years beyond completion of the UST system permanent closure in the following ways:

(1) By the owners and operators who took the UST system out of service, and

By the current owners and operators of the UST system site.

(f) **Abandoned UST Systems.**

No person or municipality shall use or operate an abandoned UST system.

(Effective July 28, 1994)

Sec. 22a-449 (d)-108. Operator training required

(a) **Training and certification**

(1) Effective August 8, 2012, no person shall own or operate a UST or UST system without designating Class A, B, and C Operators who have been trained and certified in accordance with an approved training program.

(2) On or before August 8, 2012, for each existing underground storage facility in the state, owners or operators shall submit to the commissioner a statement, in a format approved by the commissioner and signed by the owner or operator and the designated Class A and Class B Operators, identifying the following: (A) the names of the designated Class A and B Operators, (B) the approved training programs from which they obtained their certification, (C) the dates of certification and (D) the dates such certification expires. For underground storage facilities whose USTs or UST systems begin operation after August 8, 2012, this information shall be submitted prior to beginning operation.

(3) Effective August 8, 2012, at each underground storage facility, owners or operators shall post operator response guidelines meeting the requirements of subsection (c) (1) of this section.

(4) Effective August 8, 2012, at each underground storage facility, owners or operators shall post an information sheet regarding all Class C Operators assigned to that underground storage facility. Such information sheet shall include: (A) the names of each designated Class C Operator, (B) the name of the approved training program(s) from which each Class C Operator obtained her or his certification, or the name of the certified Class A or B Operator who trained each Class C Operator, (C) the certification dates for each Class C Operator, (D) the expiration dates of each such certification, and (F) the most recent date of Class C Operator training.

(5) After August 8, 2012, owners or operators shall revise and resubmit to the commissioner a signed statement that includes the information required in subsection (b) of this section whenever there is a change in designated Class A or B Operators, a change of approved training programs, or when a designated Class A or B Operator has been retrained as ordered by the commissioner pursuant to subsection (e) of

this section, not more than 30 days after the change for each affected underground storage facility.

(6) After August 8, 2012, newly designated Class A and B Operators shall be trained in accordance with an approved training program not more than 30 days after being designated and newly designated Class C Operators shall be trained in accordance with an approved training program or by a certified Class A or B Operator before assuming the responsibilities of the Class C Operator.

(7) If an approved operator training program has had its approval revoked pursuant to subsection (d) (1) of this section, any Class A, B, or C Operator who has been trained and certified by this program shall remain trained and certified unless (A) they are directed by the commissioner to retrain pursuant to subsection (e) of this section, or (B) their certification expires pursuant to the previously approved training program curriculum.

(b) **Operator Training Program Requirements.**

Any operator training program shall either be approved by the commissioner pursuant to subdivision (1) or (3) of this subsection, or deemed approved pursuant to subdivision (2) of this subsection to meet the requirements of this section.

(1) An operator training program shall be approved in writing by the commissioner. The commissioner shall approve a program if after submittal of the training curriculum and instructor's qualifications to the commissioner for review, the commissioner finds that the program meets the following requirements:

(A) Class A Operator training shall include, but not be limited to:

(i) Familiarization with applicable federal, state, and local law regarding the operation of USTs and UST systems, including those provisions which apply to notification requirements, spill prevention, overfill prevention, release detection, corrosion protection, emergency response, product compatibility, release and suspected release reporting, temporary and permanent closure requirements, operator training, and financial responsibility documentation requirements;

(ii) Certification that an appropriately administered and evaluated test demonstrating knowledge of the applicable statutes and regulations regarding the operation of USTs and UST systems, including, but not limited to, those provisions listed in subparagraph (A)(i) of this subdivision, has been passed;

(iii) Requirement for retraining or refresher training at least every 2 years following initial training.

(B) Class B Operator training shall include, but not be limited to:

(i) Familiarization with applicable federal, state, and local law regarding the operation of USTs and UST systems;

(ii) Familiarization with the components of USTs and UST systems, the materials of which UST and UST system components are composed, methods of UST and UST system release detection, including the best available technology, UST and UST system spill protection, overfill prevention, release detection, corrosion protection, emergency response requirements, product compatibility, reporting and recordkeeping requirements, and Class C Operator requirements;

(iii) Familiarization with conducting and documenting monthly maintenance inspections pursuant to subsection (c) of this section and yearly maintenance inspections as applicable.

(iv) Certification that an appropriately administered and evaluated test demonstrating such knowledge has been passed;

(v) Requirement for retraining or refresher training at least every 2 years following initial training.

(C) Class C Operator training shall include, but not be limited to:

(i) Familiarization with the operator response guidelines, including, but not limited to, thorough knowledge of the required response to emergencies and alarms;

(ii) Familiarization with the layout of a typical UST system, as well as familiarity with the particular layout of the UST System or UST Systems at the underground storage facility or facilities at which the Class C Operator has responsibilities;

(iii) Familiarization with reading alarm enunciation panels;

(iv) Certification, signed by the Class A or B Operator or the approved training program, that an appropriately administered and evaluated test demonstrating such knowledge has been passed;

(v) Requirement for retraining or refresher training at least every 2 years following initial training.

(2) The following operator training programs shall be deemed approved by the commissioner:

(A) For Class A Operator training, certification as a Connecticut Class A UST System Operator by the International Code Council (ICC) every 2 years.

(B) For Class B Operator training, certification as a Connecticut Class B UST System Operator by the International Code Council (ICC) every 2 years.

(C) For Class C Operator training, training provided by the designated Class A or Class B Operator at the underground storage facility. Such training shall include a physical tour of the underground storage facility, instruction regarding the alarm enunciation panel and appropriate responses to emergencies and alarms as set forth in the posted operator response guidelines. Following the initial training, retraining or refresher training shall be completed at least every 2 years.

(3) The commissioner may also approve, as meeting Connecticut requirements, Class A, B, and C Operator training programs conducted or approved by other states or the ICC.

(c) **Additional Operator Requirements.**

(1) Operator Response Guidelines shall be in written form and include reporting procedures for releases and suspected releases, emergency contact phone numbers, malfunctioning equipment lock-out/tag-out and notification procedures, and initial mitigation protocol for releases, suspected releases and other emergencies.

(2) Monthly visual inspections meeting the following minimum requirements shall be conducted at all underground storage facilities:

(A) Inspections shall be conducted by or under the direction of the Class A or B Operator.

(B) The results of each inspection shall be recorded in a monthly inspection report and maintained on-site for a period of no less than three years.

(C) The items listed in subclauses (i) through (ix), inclusive, of this subparagraph shall be inspected periodically, as indicated. For each item, the inspector shall inspect the item and record on the inspection report either ''no defect'' or ''defect'', to reflect the status of the item. For any items for which a ''defect'' status has been recorded, repairs shall be performed not later than thirty days after discovery. Each such repair shall be recorded in the inspection report with details as to how such defect was resolved. Such activities as required by this subparagraph shall be performed in accordance with the Petroleum Equipment Institute RP900-08, ''Recommended Practices for the Inspection and Maintenance of UST Systems''.

(i) Inspect monthly vent risers;

(ii) Inspect monthly pressure/vacuum vent caps;

(iii) Inspect monthly spill buckets, new piping containment sumps and new under-dispenser containment sumps;

(iv) Inspect monthly dry break poppet valves to ensure that each such valve forms a continuous seal, including but not limited to ensuring that each valve depresses evenly across the valve seat and that it reseats properly;

(v) Inspect monthly motor fuel dispenser hoses to ensure that there are no tears, leaks, holes, kinks, crimps or defects of any kind;

(vi) Inspect monthly motor fuel dispenser cabinet interiors;

(vii) Inspect monthly transfer and dispensing areas to ensure that any release has been reported and cleaned in accordance with all applicable federal, state, and local requirements;

(viii) Inspect monthly leak and product monitoring device alarm enunciation panels to ensure the proper operation of leak and product monitoring and detection systems;

(ix) Inspect annually overfill prevention devices.

(D) Should any oil, water, or debris be discovered in any secondary containment component of any UST of UST system, such oil, water, or debris shall be removed and disposed in accordance with all applicable federal, state, and local requirements.

(3) The Class A Operator shall ensure that all UST system components, including but not limited to, tanks, pumps, and appurtenances, that will contact, store or dispense petroleum are compatible with the petroleum or bio-fuel blends that will be stored or dispensed.

(4) Delegation of the responsibilities of this subsection to designated Class A, B, and C Operators shall not relieve the owner or operator of a UST or UST system from liability for non-compliance with the requirements of this subsection.

(d) **Revocation of Operator Training Program Approval.**

(1) If the commissioner determines that an approved or deemed approved operator training program has become insufficient to adequately train Class A, B, or C Operators, the commissioner shall revoke the approval of the operator training program. Evidence of such insufficiency shall include, but not be limited to, inadequately trained Class A, B, or C Operators; compliance issues; or a failure to document completion of required training.

(2) An operator training program may be re-approved if it is demonstrated that all program defects have been corrected and if a revised curriculum and instructor's qualification is submitted to the commissioner and approved pursuant to subsection (b) of this section.

(3) An approved operator training program may withdraw as an approved operator training program by making such a request in writing to the commissioner.

(e) **Operator Retraining.**

If the commissioner determines that a UST or UST system is not in compliance with the release prevention and release detection measures, then the commissioner shall order that the responsible Class A, B, or C Operator assigned to that UST or UST system be retrained and recertified in accordance with an approved training program, not later than 30 days after being so ordered or within such other time as the commissioner specifies. Retraining pursuant to this subsection shall not excuse non-compliance nor create a presumption against any related enforcement.

(Effective May 31, 2012)

Sec. 22a-449 (d)-109. Financial responsibility

(a) **Applicability.**

(1) Section 22a-449 (d)-109 of these regulations applies to owners and operators of all petroleum underground storage tank (UST) systems except as otherwise provided in subsection 22a-449 (d)-109 (a) of these regulations.

(2) Owners and operators of petroleum UST systems are subject to these requirements if they are in operation on or after the date for compliance established in subsection 22a-449 (d)-109 (b) of these regulations.

(3) State and Federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of this section.

(4) The requirements of this section do not apply to owners and operators of any UST system described in subdivisions 22a-449 (d)-101 (a) (2) and (3) of these regulations.

(5) If the owner and operator of a petroleum underground storage tank are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance. Regardless of which party complies, the date set for compliance at a particular facility is determined by the characteristics of the owner as set forth in subsection 22a-449 (d)-109 (b) of these regulations.

(b) **Compliance dates.** Owners of petroleum underground storage tanks are required to comply with the requirements of section 22a-449 (d)-109 of these regulations by the following dates:

(1) All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of $20 million or more to the U.S. Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration; January 24, 1989, except that compliance with subdivision 22a-449 (d)-109 (e) (2) of these regulations is required by: July 24, 1989.

(2) All petroleum marketing firms owning 100-999 USTs; October 26, 1989.

(3) All petroleum marketing firms owning 13-99 USTs at more than one facility; April 26, 1991.

(4) All petroleum UST owners not described in subdivisions 22a-449 (d)-109 (b) (1), (2) and (3) of these regulations, excluding local government entities; October 26, 1991.

(5) All local government entities; one year from the date of promulgation of additional mechanisms for use by local government entities to comply with financial responsibility requirements for underground storage tanks containing petroleum.

(c) **Definition of terms.**

When used in section 22a-449 (d)-109 of these regulations, the following terms shall have the meanings given below:

(1) Accidental release means any sudden or nonsudden release of petroleum from an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner or operator;

(2) Bodily injury shall have the meaning given to this term by applicable state law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury;

(3) Controlling interest means direct ownership of at least 50 percent of the voting stock of another entity;

(4) Director of the Implementing Agency means the Commissioner of Environmental Protection of the State of Connecticut, or the Commissioner's designee;

(5) Financial reporting year means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared:

(A) A 10-K report submitted to the SEC;

(B) An annual report of tangible net worth submitted to Dun and Bradstreet; or

(C) Annual reports submitted to the Energy Information Administration or the Rural Electrification Administration. ''Financial reporting year'' may thus comprise a fiscal or a calendar year period;

(6) Legal defense cost is any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought,

(A) By EPA or a state to require corrective action or to recover the costs of corrective action;

(B) By or on behalf of a third party for bodily injury or property damage caused by an accidental release; or

(C) By any person to enforce the terms of a financial assurance mechanism;

(7) Occurrence means an accident, including continuous or repeated exposure to conditions, which results in a release from an underground storage tank;

(A) This definition is intended to assist in the understanding of these regulations and is not intended either to limit the meaning of ''occurrence'' in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of ''occurrence'';

(8) Owner or operator, when the owner or operator are separate parties, refers to the party that is obtaining or has obtained financial assurances;

(9) Petroleum marketing facilities include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public;

(10) Petroleum marketing firms are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms;

(11) Property damage shall have the meaning given this term by applicable state law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective action associated with releases from tanks which are covered by the policy;

(12) Provider of financial assurance means an entity that provides financial assurance to an owner or operator of an underground storage tank through one of the mechanisms listed in subsections 22a-449 (d)-109 (f) to (n), inclusive, of these regulations, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state;

(13) Substantial business relationship means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued ''incident to that relationship'' if it arises from and depends on existing economic transactions between the guarantor and the owner or operator;

(14) Tangible net worth means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to

patents or royalties. For purposes of this definition, ''assets'' means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions; and

(15) Termination under subdivisions 22a-449 (d)-109 (h) (2) (A) and (B) of these regulations means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

(d) **Amount and scope of required financial responsibility.**

(1) Owners or operators of petroleum underground storage tanks shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following per-occurrence amounts:

(A) For owners or operators of petroleum underground storage tanks that are located at petroleum marketing facilities, or that handle an average of more than 10,000 gallons of petroleum per month based on annual throughput for the previous calendar year; $1 million.

(B) For all other owners or operators of petroleum underground storage tanks; $500,000.

(2) Owners or operators of petroleum underground storage tanks shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following annual aggregate amounts:

(A) For owners or operators of 1 to 100 petroleum underground storage tanks, $1 million; and

(B) For owners or operators of 101 or more petroleum underground storage tanks, $2 million.

(3) For the purposes of subdivisions 22a-449 (d)-109 (d) (2) and (6) of these regulations, only, ''a petroleum underground storage tank'' means a single containment unit and does not mean combinations of single containment units.

(4) Except as provided in subdivisions 22a-449 (d)-109 (d) (5) of these regulations, if the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for:

(A) Taking corrective action;

(B) Compensating third parties for bodily injury and property damage caused by sudden accidental releases; or

(C) Compensating third parties for bodily injury and property damage caused by nonsudden accidental releases, the amount of assurance provided by each mechanism or combination of mechanisms shall be in the full amount specified in subdivisions 22a-449 (d)-109 (d) (1) and (2) of these regulations.

(5) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum underground storage tanks, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(6) Owners or operators shall review the amount of aggregate assurance provided whenever additional petroleum underground storage tanks are acquired or installed. If the number of petroleum underground storage tanks for which assurance shall be provided exceeds 100, the owner or operator shall demonstrate financial responsibil-

ity in the amount of at least $2 million of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective. If assurance is being demonstrated by a combination of mechanisms, the owner or operator shall demonstrate financial responsibility in the amount of at least $2 million of annual aggregate assurance by the first-occurring effective date anniversary of any one of the mechanisms combined (other than a financial test or guarantee) to provide assurance.

(7) The amounts of assurance required under section 22a-449 (d)-109 of these regulations exclude legal defense costs.

(8) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

(e) **Allowable mechanisms and combinations of mechanisms.**

(1) Subject to the limitations of subdivision 22a-449 (d)-109 (e) (2) and (3) of these regulations, an owner or operator may use any one or combination of the mechanisms listed in subsections 22a-449 (d)-109 (f) to (n), inclusive, of these regulations to demonstrate financial responsibility under this section for one or more underground storage tanks.

(2) An owner or operator may use a guarantee or surety bond to establish financial responsibility only if the Attorney(s) General of the state(s) in which the underground storage tanks are located has (have) submitted a written statement to the implementing agency that a guarantee or surety bond executed as described in this section is a legally valid and enforceable obligation in that state.

(3) An owner or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this rule, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.

(f) **Financial test of self-insurance.**

(1) An owner or operator, and/or guarantor, may satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations by passing a financial test as specified in this section. To pass the financial test of self-insurance, the owner or operator, and/or guarantor shall meet the criteria of subdivisions 22a-449 (d)-109 (f) (2) or (3) of these regulations based on year-end financial statements for the latest completed fiscal year.

(2) (A) The owner or operator, and/or guarantor, shall have a tangible net worth of at least ten times:

(i) The total of the applicable aggregate amount required by subsection 22a-449 (d)-109 (d) of these regulations, based on the number of underground storage tanks for which a financial test is used to demonstrate financial responsibility to EPA under this section or to a state implementing agency under a state program approved by EPA under 40 CFR part 281;

(ii) The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 264.101, 264.143, 264.145, 265.143, 165.145, 264.147, and 265.147 or to a state implementing agency under a state program authorized by EPA under 40 CFR part 271; and

(iii) The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 144.63 or to a state implementing agency under a state program authorized by EPA under 40 CFR part 145.

(B) The owner or operator, and/or guarantor, shall have a tangible net worth of at least $10 million.

(C) The owner or operator, and/or guarantor, shall have a letter signed by the chief financial officer worded as specified in subdivision 22a-449 (d)-109 (f) (4) of these regulations.

(D) The owner or operator, and/or guarantor, shall either:

(i) File financial statements annually with the U.S. Securities and Exchange Commission, the Energy Information Administration, or the Rural Electrification Administration; or

(ii) Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet shall have assigned the firm a financial strength rating of 4A or 5A.

(E) The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a ''going concern'' qualification.

(3) (A) The owner or operator, and/or guarantor shall meet the financial test requirements of 40 CFR 264.147 (f) (1), substituting the appropriate amounts specified in subdivisions 22a-449 (d)-109 (d) (2) (A) and (B) of these regulations for the ''amount of liability coverage'' each time specified in that section.

(B) The fiscal year-end financial statements of the owner or operator, and/or guarantor, shall be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination.

(C) The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a ''going concern'' qualification.

(D) The owner or operator, and/or guarantor, shall have a letter signed by the chief financial officer, worded as specified in subdivision 22a-449 (d)-109 (f) (4) of these regulations.

(E) If the financial statements of the owner or operator, and/or guarantor, are not submitted annually to the U.S. Securities and Exchange Commission, the Energy Information Administration or the Rural Electrification Administration, the owner or operator, and/or guarantor, shall obtain a special report by an independent certified public accountant stating that:

(i) He has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of the owner or operator, and/or guarantor, with the amounts in such financial statements; and

(ii) In connection with that comparison, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) To demonstrate that it meets the financial test under subdivisions 22a-449 (d)-109 (f) (2) or (3) of these regulations, the chief financial officer of the owner or operator, or guarantor, shall sign, within 120 days of the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted:

LETTER FROM CHIEF FINANCIAL OFFICER

I am the chief financial officer of [insert: name and address of the owner or operator, or guarantor]. This letter is in support of the use of [insert: ''the financial test of self-insurance,'' and/or ''guarantee''] to demonstrate financial responsibility for [insert: ''taking corrective action'' and/or ''compensating third parties for bodily

injury and property damage''] caused by [insert: ''sudden accidental releases'' and/or ''nonsudden accidental releases''] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s).

Underground storage tanks at the following facilities are assured by this financial test or a financial test under an authorized State program by this [insert: ''owner or operator,'' and/or ''guarantor'']: [List for each facility: the name and address of the facility where tanks assured by this financial test are located, and whether tanks are assured by this financial test or a financial test under a State program approved under 40 CFR part 281. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test or a financial test under a State program authorized under 40 CFR part 281 by the tank identification number provided in the notification submitted pursuant to subsection 22a-449 (d)-102 (b) of these regulations or the corresponding State requirements.]

A [insert: ''financial test,'' and/or ''guarantee''] is also used by this [insert: ''owner or operator,'' or ''guarantor''] to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or state programs authorized by EPA under 40 CFR parts 271 and 145:

EPA Regulations	*Amount*
Closure (40 CFR 264.143 and 265.143)	$_____
Post-Closure Care (40 CFR 264.145 and 165.145)	$_____
Liability Coverage (40 CFR 264.147 and 265.147)	$_____
Corrective Action (40 CFR 264.101 (b))	$_____
Plugging and Abandonment (40 CFR 144.63)	$_____
Closure	$_____
Post-Closure Care	$_____
Liability Coverage	$_____
Corrective Action	$_____
Plugging and Abandonment	$_____
Total	$_____

This [insert: ''owner or operator,'' or ''guarantor''] has not received an adverse opinion, a disclaimer of opinion, or a ''going concern'' qualification from an independent auditor on his financial statements for the latest completed fiscal year.

[Fill in the information for Alternative I if the criteria of subdivisions 22a-449 (d)-109 (f) (2) of these regulations are being used to demonstrate compliance with the financial test requirements. Fill in the information for Alternative II if the criteria of subdivisions 22a-449 (d)p109 (f) (3) of these regulations are being used to demonstrate compliance with the financial test requirements.]

Alternative I

1. Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee . . . . . $_____
2. Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee . . . . . $_____
3. Sum of lines 1 and 2 . . . . . $_____
4. Total tangible assets . . . . . $_____

5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6] . . . . . $_____
6. Tangible net worth [subtract line 5 from line 4] . . . . . $_____

	Yes	No
7. Is line 6 at least $10 million?	$_____	_____
8. Is line 6 at least 10 times line 3?	$_____	_____
9. Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?	$_____	_____
10. Have financial statements for the latest fiscal year been filed with the Energy Information Administration?	$_____	_____
11. Have financial statements for the latest fiscal year been filed with the Rural Electrification Administration?	$_____	_____
12. Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of 4A or 5A? [Answer ''Yes'' only if both criteria have been met.]	$_____	_____

Alternative II

1. Amount of annual UST aggregate coverage being assured by a test, and/or guarantee . . . . . $_____
2. Amount of corrrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee . . . . . $_____
3. Sum of lines 1 and 2 . . . . . $_____
4. Total tangible assets . . . . . $_____
5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6] . . . . . $_____
6. Tangible net worth [subtract line 5 from line 4] . . . . . $_____
7. Total assets in the U.S. [required only if less than 90 percent of assets are located in the U.S.] . . . . . $_____

	Yes	No
8. Is line 6 at least $10 million?	$_____	_____
9. Is line 6 at least 6 times line 3?.	$_____	_____
10. Are at least 90 percent of assets located in the U.S.? [If ''No,'' complete line 11.]	$_____	_____
11. Is line 7 at least 6 times line 3? [Fill in either lines 12-15 or lines 16-18:]	$_____	_____
12. Current assets	_____	
13. Current liabilities	$_____	
14. Net working capital [subtract line 13 from line 12]	$_____	
15. Is line 14 at least 6 times line 3?	$_____	_____
16. Current bond rating of most recent bond issue	$_____	_____
17. Name of rating service	$_____	_____
18. Date of maturity of bond	$_____	_____
19. Have financial statements for the latest fiscal year been filed with the SEC, the Energy Information Administration, or the Rural Electrification Administration?	$_____	_____

[If ''No,'' please attach a report from an independent certified public accountant certifying that there are no material differences between the data as reported in lines 4-18 above and the financial statements for the latest fiscal year.]

[For both Alternative I and Alternative II complete the certification with this statement.]

I hereby certify that the wording of this letter is identical to the wording specified in subdivision 22a-449 (d)-109 (f) (4) of these regulations as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

(5) If an owner or operator using the test to provide financial assurance finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator shall obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(6) The Director of the implementing agency may require reports of financial condition at any time from the owner or operator, and/or guarantor. If the Director finds, on the basis of such reports or other information, that the owner or operator, and/or guarantor, no longer meets the financial test requirements of subdivisions 22a-449 (d)-109 (f) (2) or (3) and (4) of these regulations, the owner or operator shall obtain alternate coverage within 30 days after notification of such a finding.

(7) If the owner or operator fails to obtain alternate assurance within 150 days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within 30 days of notification by the Director of the implementing agency that he or she no longer meets the requirements of the financial test, the owner or operator shall notify the Director of such failure within 10 days.

(g) **Guarantee.**

(1) An owner or operator may satisfy the requirements of subsections 22a-449 (d)-109 (d) of these regulations by obtaining a guarantee that conforms to the requirements of section 22a-449 (d)-109 (g) of these regulations. The guarantor shall be:

(A) A firm that

(i) possesses a controlling interest in the owner or operator;

(ii) possesses a controlling interest in a firm described under subparagraph 22a-449 (d)-109 (g) (1) (A) (i) of these regulations; or,

(iii) is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator; or,

(B) A firm engaged in a substantial business relationship with the owner or operator and issuing the guarantee as an act incident to that business relationship.

(2) Within 120 days of the close of each financial reporting year the guarantor shall demonstrate that it meets the financial test criteria of subsection 22a-449 (d)-109 (f) of these regulations based on year-end financial statements for the latest completed financial reporting year by completing the letter from the chief financial officer described in subdivision 22a-449 (d)-109 (f) (4) of these regulations and

shall deliver the letter to the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within 120 days of the end of that financial reporting year the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner or operator. If the Director of the implementing agency notifies the guarantor that he no longer meets the requirements of the financial test of subdivisions 22a-449 (d)-109 (f) (2) or (3) and (4) of these regulations, the guarantor shall notify the owner or operator within 10 days of receiving such notification from the Director. In both cases, the guarantee shall terminate no less than 120 days after the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator shall obtain alternative coverage as specified in subdivision 22a-449 (d)-109 (u) (3) of these regulations.

(3) The guarantee shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

GUARANTEE

Guarantee made this [date] by [name of guaranteeing entity], a business entity organized under the laws of the state of [name of state], herein referred to as guarantor, to [the state implementing agency] and to any and all third parties, and obligees, on behalf of [owner or operator] of [business address].

Recitals

(1) Guarantor meets or exceeds the financial test criteria of subdivisions 22a-449 (d)-109 (f) (2) or (3) and (4) of these regulations and agrees to comply with the requirements for guarantors as specified in subdivisions 22a-449 (d)-109 (g) (2) of these regulations.

(2) [Owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subsection 22a-449 (d)-102 (b) of these regulations or the corresponding state requirement, and the name and address of the facility.] This guarantee satisfies section 22a-449 (d)-109 of these regulations requirements for assuring funding for [insert: ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases''; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in the amount of [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate.

(3) [Insert appropriate phrase: ''On behalf of our subsidiary'' (if guarantor is corporate parent of the owner or operator); ''On behalf of our affiliate'' (if guarantor is a related firm of the owner or operator); or ''Incident to our business relationship with'' (if guarantor is providing the guarantee as an incident to a substantial business relationship with owner or operator)] [owner or operator], guarantor guarantees to [implementing agency] and to any and all third parties that:

In the event that [owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and the [Director of the Implementing Agency] has determined or suspects that a release has occurred

at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the [Director], shall fund a standby trust fund in accordance with the provisions of subsection 22a-449 (d)-109 (s) of these regulations, in an amount not to exceed the coverage limits specified above.

In the event that the [Director] determines that [owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with section 22a-449 (d)-106 of these regulations, the guarantor upon written instructions from the [Director] shall fund a standby trust in accordance with the provisions of subsection 22a-449 (d)-109 (s) of these regulations in an amount not to exceed the coverage limits specified above.

If [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [''sudden'' and/or ''nonsudden''] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the [Director], shall fund a standby trust in accordance with the provisions of subsections 22a-449 (d)-109 (s) of these regulations to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of subdivisions 22a-449 (d)-109 (f) (2) or (3) and (4) of these regulations, guarantor shall send within 120 days of such failure, by certified mail, notice to [owner or operator]. The guarantee shall terminate 120 days from the date of receipt of the notice by [owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to sections 22a-449 (d)-101 to 109, inclusive, of these regulations.

(7) Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] shall comply with the applicable financial responsibility requirements of section 22a-449 (d)-109 of these regulations for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [owner or operator], as evidenced by the return receipt.

(8) The guarantor's obligation does not apply to any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaded to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily damage or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or

agreement other than a contract or agreement entered into to meet the requirements of subsection 22a-449 (d)-109 (d) of these regulations.

(9) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in subdivision 22a-449 (d)-109 (g) (3) of these regulations as such regulations were constituted on the effective date shown immediately below.

Effective date:_____

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:_____

(4) An owner or operator who uses a guarantee to satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations shall establish a standby trust fund when the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee shall be deposited directly into the standby trust fund in accordance with instructions from the Director of the implementing agency under subsection 22a-449 (d)-109 (s) of these regulations. This standby trust fund shall meet the requirements specified in subsection 22a-449 (d)-109 (n) of these regulations.

(h) **Insurance and risk retention group coverage.**

(1) An owner or operator may satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations by obtaining liability insurance that conforms to the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.

(2) Each insurance policy shall be amended by an endorsement worded as specified in subdivision 22a-449 (d)-109 (h) (2) (A) of these regulations of this section, or evidenced by a certificate of insurance worded as specified in subdivision 22a-449 (d)-109 (h) (2) (B) of these regulations, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

(A) Endorsement

Name: [name of each covered location]

_____

_____

Address: [address of each covered location]

_____

_____

Policy Number:_____

Period of Coverage: [current policy period]

_____

_____

Name of [Insurer or Risk Retention Group]:

_____

_____

Address of [Insurer or Risk Retention Group]:

_____

_____

Name of Insured:_____

Address of Insured:

_____

_____

ENDORSEMENT:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tanks:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subsection 22a-449 (d)-102 (b) of these regulations, or the corresponding state requirement, and the name and address of the facility.] for [insert: ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases''; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the ''each occurrence'' and ''annual aggregate'' limits of the Insurer's or Group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) to (e), inclusive, of this Paragraph 2 are hereby amended to conform with subsections (a) to (e), inclusive;

a. Bankruptcy or insolvency of the insured shall not relieve the [''Insurer'' or ''Group''] of its obligations under the policy to which this endorsement is attached.

b. The [''Insurer'' or ''Group''] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the [''Insurer'' or ''Group'']. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in subsections 22a-449 (d)-109 (f) to (m), inclusive, of these regulations.

c. Whenever requested by [a Director of an implementing agency], the [''Insurer'' or ''Group''] agrees to furnish to [the Director] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the [''Insurer'' or ''Group''], except for non-payment of premium or misrepresentation by the insured, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the insured shall be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the [''Insurer'' or ''Group''] within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in subdivision 22a-449 (d)-109 (h) (2) (A) of these regulations and that the [''Insurer'' or ''Group''] is [''licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states'']].

[Signature of authorized representative of Insurer or Risk Retention Group]

[Name of person signing]

[Title of person signing], Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

(B) Certificate of Insurance

Name: [name of each covered location]

_____

_____

Address: [address of each covered location]

_____

_____

Policy Number:_____

Endorsement (if applicable):_____

Period of Coverage: [current policy period]

_____

Name of [Insurer or Risk Retention Group]:

_____

_____

Address of [Insurer or Risk Retention Group]:

_____

_____

Name of Insured:_____

Address of Insured:

_____

_____

_____

Certification:

1. [Name of Insurer or Risk Retention Group], [the ''Insurer'' or ''Group''], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subsection 22a-449 (d)-102 (b) of these regulations, or the corresponding state requirement, and the name and address of the facility.]

for [insert: ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases''; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the ''each occurrence'' and ''annual aggregate'' limits of the Insurer's or Group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The [''Insurer'' or ''Group''] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the [''Insurer'' or ''Group''] of its obligations under the policy to which this certificate applies.

b. The [''Insurer'' or ''Group''] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the [''Insurer'' or ''Group'']. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in subsections 22a-449 (d)-109 (f) to (m), inclusive, of these regulations.

c. Whenever requested by [a Director of an implementing agency], the [''Insurer'' or ''Group''] agrees to furnish to [the Director] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the [''Insurer'' or ''Group''], except for non-payment of premium or misrepresentation by the insured, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-

payment of premium or misrepresentation by the insured shall be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the [''Insurer'' or ''Group''] within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in subdivision 22a-449 (d)-109 (h) (2) (B) of these regulations and that the [''Insurer'' or ''Group''] is [''licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states'']].

[Signature of authorized representative of Insurer]

[Type name]

[Title], Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

(3) Each insurance policy shall be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

(i) **Surety bond.**

(1) An owner or operator may satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations by obtaining a surety bond that conforms to the requirements of this section. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the latest Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

PERFORMANCE BOND

Date bond executed:_____

Period of coverage:_____

Principal: [legal name and business address of owner or operator]

_____

Type of organization: [insert ''individual,'' ''joint venture,'' ''partnership,'' or ''corporation'']

_____

State of incorporation (if applicable):

_____

Surety(ies): [name(s) and business address(es)]

_____

Scope of Coverage: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instru-

ment is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subsection 22a-449 (d)-102 (b) of these regulations, or the corresponding state requirement, and the name and address of the facility. List the coverage guaranteed by the bond: ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases'' ''arising from operating the underground storage tank''].

Penal sums of bond:

Per occurrence $_____

Annual aggregate $_____

Surety's bond number:_____

Know All Persons by These Presents, that we, the Principal and Surety(ies), hereto are firmly bound to [the implementing agency], in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sums jointly and severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

Whereas said Principal is required under Subtitle I of the Resource Conservation and Recovery Act (RCRA), as amended, to provide financial assurance for [insert: ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases''; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tanks identified above, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the Principal shall faithfully [''take corrective action, in accordance with section 22a-449 (d)-106 of these regulations and the Director of the state implementing agency's instructions for,'' and/or ''compensate injured third parties for bodily injury and property damage caused by'' either ''sudden'' or ''nonsudden'' or ''sudden and nonsudden''] accidental releases arising from operating the tank(s) identified above, or if the Principal shall provide alternate financial assurance, as specified in section 22a-449 (d)-109 of these regulations, within 120 days after the date the notice of cancellation is received by the Principal from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

Such obligation does not apply to any of the following:

(a) Any obligation of [insert owner or operator] under a workers compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of subsection 22a-449 (d)-109 (d) of these regulations.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by [the Director of the Implementing Agency] that the Principal has failed to [''take corrective action, in accordance with section 22a-449 (d)-106 of these regulations and the Director's instructions,'' and/or ''compensate injured third parties''] as guaranteed by this bond, the Surety(ies) shall either perform [''corrective action in accordance with sections 22a-449 (d)-101 to 113, inclusive, of these regulations and the Director's instructions,'' and/or ''third-party liability compensation''] or place funds in an amount up to the annual aggregate penal sum into the standby trust fund as directed by [the Director of the Implementing Agency] under subsections 22a-449 (d)-109 (s) of these regulations.

Upon notification by [the Director] that the Principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the Principal from the Surety(ies) and that [the Director] has determined or suspects that a release has occurred, the Surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by [the Director] under subsection 22a-449 (d)-109 (s) of these regulations.

The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the annual aggregate to the penal sum shown on the face of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal, as evidenced by the return receipt.

The Principal may terminate this bond by sending written notice to the Surety(ies).

In Witness Thereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in subdivision 22a-449 (d)-109 (i) (2) of these regulations as such regulations were constituted on the date this bond was executed.

Principal

[Signature(s)]_____

[Names(s)]_____

[Title(s)]_____

[Corporate seal]

Corporate Surety(ies)

[Name and address]_____

[State of Incorporation]:_____

[Liability limit]: $_____

[Signature(s)]_____

[Names(s) and title(s)]_____

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: $_____

(3) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.

(4) The owner or operator who uses a surety bond to satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations shall establish a standby trust fund when the surety bond is acquired. Under the terms of the bond, all amounts paid by the surety under the bond shall be deposited directly into the standby trust fund in accordance with instructions from the Director under subsection 22a-449 (d)-109 (s) of these regulations. This standby trust fund shall meet the requirements specified in subsection 22a-449 (d)-109 (n) of these regulations.

(j) **Letter of credit.**

(1) An owner or operator may satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations by obtaining an irrevocable standby letter of credit that conforms to the requirements of this section. The issuing institution shall be an entity that has the authority to issue letters of credit in each state where used and whose letter-of-credit operations are regulated and examined by a federal or state agency.

(2) The letter of credit shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

IRREVOCABLE STANDBY LETTER OF CREDIT

[Name and address of issuing institution]

[Name and address of Director(s) of state implementing agency(ies)]

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. -- in your favor, at the request and for the account of [owner or operator name] of [address] up to the aggregate amount of [in words] U.S. dollars ($[insert dollar

amount]), available upon presentation [insert, if more than one Director of a state implementing agency is a beneficiary, ''by any one of you''] of

(1) your sight draft, bearing reference to this letter of credit, No. --, and

(2) your signed statement reading as follows: ''I certify that the amount of the draft is payable pursuant to regulations issued under authority of Subtitle I of the Resource Conservation and Recovery Act of 1976, as amended.''

This letter of credit may be drawn on to cover [insert: ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases''] arising from operating the underground storage tank(s) identified below in the amount of [in words] $[insert dollar amount] per occurrence and [in words] $[insert dollar amount] annual aggregate:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subsection 22a-449 (d)-102 (b) of these regulations, or the corresponding state requirement, and the name and address of the facility.]

The letter of credit may not be drawn on to cover any of the following:

(a) Any obligation of [insert owner or operator] under workers compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of subsection 22a-449 (d)-109 (d) of these regulations.

This letter of credit is effective as of [date] and shall expire on [date], but such expiration date shall be automatically extended for a period of [at least the length of the original term] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [owner or operator] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that [owner or operator] is so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by [owner or operator], as shown on the signed return receipt.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner or operator] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in subdivision 22a-449 (d)-109 (j) (2) of these regulations as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert ''the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce,'' or ''the Uniform Commercial Code'']. (3) An owner or operator who uses a letter of credit to satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations shall also establish a standby trust fund when the letter of credit is acquired. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Director of the Implementing Agency shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Director under subsection 22a-449 (d)-109 (s) of these regulations. This standby trust fund shall meet the requirements specified in subsection 22a-449 (d)-109 (n) of these regulations.

(4) The letter of credit shall be irrevocable with a term specified by the issuing institution. The letter of credit shall provide that credit be automatically renewed for the same term as the original term, unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the 120 days shall begin on the date when the owner or operator receives the notice, as evidenced by the return receipt.

(k) **Use of state-required mechanism.**

(1) For underground storage tanks located in a state that does not have an approved program, and where the state requires owners or operators of underground storage tanks to demonstrate financial responsibility for taking corrective action and/or for compensating third parties for bodily injury and property damage, an owner or operator may use a state-required financial mechanism to meet the requirements of subsection 22a-449 (d)-109 (d) of these regulations if the Director of the Implementing Agency determines that the state mechanism is at least equivalent to the financial mechanisms specified in this section.

(2) The Director of the Implementing Agency shall evaluate the equivalency of a state-required mechanism principally in terms of: certainty of the availability of funds for taking corrective action and/or for compensating third parties; the amount of funds that shall be made available; and the types of costs covered. The Director of the Implementing Agency may also consider other factors as is necessary.

(3) The state, an owner or operator, or any other interested party may submit to the Director of the Implementing Agency, a written petition requesting that one or more of the state-required mechanisms be considered acceptable for meeting the requirements of subsection 22a-449 (d)-109 (d) of these regulations. The submission shall include copies of the appropriate state statutory and regulatory requirements and shall show the amount of funds for corrective action and/or for compensating third parties assured by the mechanism(s). The Director of the Implementing Agency may require the petitioner to submit additional information as is deemed necessary to make this determination.

(4) Any petition under this section may be submitted on behalf of all of the state's underground storage tank owners and operators.

(5) The Director of the Implementing Agency shall notify the petitioner of his determination regarding the mechanism's acceptability in lieu of financial mecha-

nisms specified in this section. Pending this determination, the owners and operators using such mechanisms shall be deemed to be in compliance with the requirements of subsection 22a-449 (d)-109 (d) of these regulations for underground storage tanks located in the state for the amounts and types of costs covered by such mechanisms.

(*l*) **State fund or other state assurance.**

(1) An owner or operator may satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations for underground storage tanks located in Connecticut, where the Connecticut Department of Environmental Protection is administering the requirements of section 22a-449 (d)-109 of these regulations, which assures that monies shall be available from a state fund or state assurance program to cover costs up to the limits specified in subsection 22a-449 (d)-109 (d) of these regulations or otherwise assures that such costs shall be paid if the Director of the Implementing Agency determines that the state's assurance is at least equivalent to the financial mechanisms specified in section 22a-449 (d)-109 of these regulations.

(2) The Director of the Implementing Agency shall evaluate the equivalency of a state fund or other state assurance principally in terms of: Certainty of the availability of funds for taking corrective action and/or for compensating third parties; the amount of funds that shall be made available; and the types of costs covered. The Director of the Implementing Agency may also consider other factors as is necessary.

(3) The state shall submit to the Director of the Implementing Agency, a description of the state fund or other state assurance to be supplied as financial assurance, along with a list of the classes of underground storage tanks to which the funds may be applied. The Director of the Implementing Agency may require the state to submit additional information as is deemed necessary to make a determination regarding the acceptability of the state fund or other state assurance. Pending the determination by the Director of the Implementing Agency, the owner or operator of a covered class of USTs shall be deemed to be in compliance with the requirements of subsection 22a-449 (d)-109 (d) of these regulations for the amounts and types of costs covered by the state fund or other state assurance.

(4) The Director of the Implementing Agency shall notify the state of his determination regarding the acceptability of the state's fund or other assurance in lieu of financial mechanisms specified in section 22a-449 (d)-109 of these regulations. Within 60 days after the Director of the Implementing Agency notifies a state that a state fund or other state assurance is acceptable, the state shall provide to each owner or operator for which it is assuming financial responsibility a letter or certificate describing the nature of the state's assumption of responsibility. The letter or certificate from the state shall include, or have attached to it, the following information: the facility's name and address and the amount of funds for corrective action and/or for compensating third parties that is assured by the state. The owner or operator shall maintain this letter or certificate on file as proof of financial responsibility in accordance with subdivision 22a-449 (d)-109 (r) (2) (E) of these regulations.

(m) **Trust fund.**

(1) An owner or operator may satisfy the requirements of subsection 22a-449 (d)-109 (d) of these regulations by establishing a trust fund that conforms to the requirements of this section. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2) The wording of the trust agreement shall be identical to the wording specified in subdivision 22a-449 (d)-109 (n) (2) (A) of these regulations, and shall be accompa-

nied by a formal certification of acknowledgement as specified in subdivision 22a-449 (d)-109 (n) (2) (B) of these regulations.

(3) The trust fund, when established, shall be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining required coverage.

(4) If the value of the trust fund is greater than the required amount of coverage, the owner or operator may submit a written request to the Director of the implementing agency for release of the excess.

(5) If other financial assurance as specified in section 22a-449 (d)-109 is substituted for all or part of the trust fund, the owner or operator may submit a written request to the Director of the implementing agency for release of the excess.

(6) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subdivisions 22a-449 (d)-109 (m) (4) or (5) of these regulations, the Director of the implementing agency shall instruct the trustee to release to the owner or operator such funds as the Director specifies in writing.

(n) **Standby trust fund.**

(1) An owner or operator using any one of the mechanisms authorized by subsections 22a-449 (d)-109 (g), (i) or (j) of these regulations shall establish a standby trust fund when the mechanism is acquired. The trustee of the standby trust fund shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal agency or an agency of the state in which the fund is established.

(2) (A) The standby trust agreement, or trust agreement, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

TRUST AGREEMENT

Trust agreement, the ''Agreement,'' entered into as of [date] by and between [name of the owner or operator], a [name of state] [insert ''corporation,'' ''partnership,'' ''association,'' or ''proprietorship''], the ''Grantor,'' and [name of corporate trustee], [insert ''Incorporated in the state of _____'' or ''a national bank''], the ''Trustee.''

Whereas, the United States Environmental Protection Agency, ''EPA,'' an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of an underground storage tank shall provide assurance that funds shall be available when needed for corrective action and third-party compensation for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from the operation of the underground storage tank. The attached Schedule A lists the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located that are covered by the standpoint trust agreement.

[Whereas, the Grantor has elected to establish [insert either ''a guarantee,'' ''surety bond,'' or ''letter of credit''] to provide all or part of such financial assurance for the underground storage tanks identified herein and is required to establish a standby trust fund able to accept payments from the instrument (This paragraph is only applicable to the standby trust agreement.)];

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee;

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions

As used in this Agreement:

(a) The term ''Grantor'' means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term ''Trustee'' means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of the Financial Assurance Mechanism

This Agreement pertains to the [identify the financial assurance mechanism, either a guarantee, surety bond, or letter of credit, from which the standby trust fund is established to receive payments (This paragraph is only applicable to the standby trust agreement.)].

Section 3. Establishment of Fund

The Grantor and the Trustee hereby establish a trust fund, the ''Fund,'' for the benefit of [implementing agency]. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. [The Fund is established initially as a standby to receive payments and shall not consist of any property.] Payments made by the provider of financial assurance pursuant to [the Director of the implementing agency's] instruction are transferred to the Trustee and are referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement.

The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor as provider of financial assurance, any payments necessary to discharge any liability of the Grantor established by [the state implementing agency]

Section 4. Payment for [''Corrective Action'' and/or ''Third-Party Liability Claims'']

The Trustee shall make payments from the Fund as [the Director of the implementing agency] shall direct, in writing, to provide for the payment of the costs of [insert: ''taking corrective action'' and/or compensating third parties for bodily injury and property damage caused by either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases''] arising from operating the tanks covered by the financial assurance mechanism identified in this Agreement.

The Fund may not be drawn upon to cover any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of subsection 22a-449 (d)-109 (d) of these regulations.

The Trustee shall reimburse the Grantor, or other persons as specified by [the Director], from the Fund for corrective action expenditures and/or third-party liability claims in such amounts as [the Director] shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as [the Director] specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund

Payments made to the Trustee for the Fund shall consist of cash and securities acceptable to the Trustee.

Section 6. Trustee Management

The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiaries and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2 (a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or state government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment

The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee

Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses

All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel

The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any questions arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation

The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee

The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor

trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. Instructions to the Trustee

All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule B or such other designees as the Grantor may designate by amendment to Schedule B. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by [the Director of the implementing agency] to the Trustee shall be in writing, signed by [the Director], and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or [the director] hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or [the Director], except as provided for herein.

Section 14. Amendment of Agreement

This Agreement may be amended by an instrument in writing executed by the Grantor and the Trustee, or by the Trustee and [the Director of the implementing agency] if the Grantor ceases to exist.

Section 15. Irrevocability and Termination

Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written direction of the Grantor and the Trustee, or by the Trustee and [the Director of the implementing agency], if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 16. Immunity and Indemnification

The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or [the Director of the implementing agency] issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity,

including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law

This Agreement shall be administered, construed, and enforced according to the laws of the state of [insert name of state], or the Comptroller of the Currency in the case of National Association banks.

Section 18. Interpretation

As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals (if applicable) to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in subdivision 22a-449 (d)-109 (n) (2) (A) of these regulations as such regulations were constituted on the date written above.

[Signature of Grantor]

[Name of the Grantor]

[Title]

Attest:

[Signature of Trustee]

[Name of the Trustee]

[Title]

[Seal]

[Signature of Witness]

[Name of the Witness]

[Title]

[Seal]

(B) The standby trust agreement, or trust agreement shall be accompanied by a formal certification of acknowledgement similar to the following. State requirements may differ on the proper content of this acknowledgment.

State of_____

County of_____

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of

the Board of Directors of said corporation; and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

[Name of Notary Public]

(3) The Director of the implementing agency shall instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the Director determines that no additional corrective action costs or third-party liability claims shall occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.

(4) An owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this rule.

(o) **Substitution of financial assurance mechanisms by owner or operator.**

(1) An owner or operator may substitute any alternate financial assurance mechanisms as specified in section 22a-449 (d)-109 of these regulations, provided that at all times he maintains an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements of subsection 22a-449 (d)-109 (d) of these regulations.

(2) After obtaining alternate financial assurance as specified in section 22a-449 (d)-109 of these regulations, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance.

(p) **Cancellation or nonrenewal by a provider of financial assurance.**

(1) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator.

(A) Termination of a guarantee, a surety bond, or a letter of credit may not occur until 120 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(B) Termination of insurance or risk retention group coverage, except for non-payment or misrepresentation by the insured, or state-funded assurance may not occur until 60 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for non-payment of premium or misrepresentation by the insured may not occur until a minimum of 10 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(2) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in subsection 22a-449 (d)-109 (q) of these regulations, the owner or operator shall obtain alternate coverage as specified in this section within 60 days after receipt of the notice of termination. If the owner or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the owner or operator shall notify the Director of the implementing agency of such failure and submit:

(A) The name and address of the provider of financial assurance;

(B) The effective date of termination; and

(C) The evidence of the financial assistance mechanism subject to the termination maintained in accordance with subdivision 22a-449 (d)-109 (r) (2) of these regulations.

(q) **Reporting by owner or operator.**

(1) An owner or operator shall submit the appropriate forms listed in subdivision 22a-449 (d)-109 (r) (2) of these regulations documenting current evidence of financial responsibility to the Director of the implementing agency:

(A) Within 30 days after the owner or operator identifies a release from an underground storage tank required to be reported under subsections 22a-449 (d)-105 (d) or 106 (c) of these regulations;

(B) If the owner or operator fails to obtain alternate coverage as required by this section, within 30 days after the owner or operator receives notice of:

(i) Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor,

(ii) Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism,

(iii) Failure of a guarantor to meet the requirements of the financial test,

(iv) Other incapacity of a provider of financial assurance; or

(C) As required by subdivisions 22a-449 (d)-109 (f) (7) and (p) (2) of these regulations.

(2) An owner or operator shall certify compliance with the financial responsibility requirements of sections 22a-449 (d)-101 to 113, inclusive, of these regulations as specified in the new tank notification form when notifying the appropriate state or local agency of the installation of a new underground storage tank under subsection 22a-449 (d)-102 (b) of these regulations.

(3) The Director of the Implementing Agency may require an owner or operator to submit evidence of financial assurance as described in subdivision 22a-449 (d)-109 (r) (2) of these regulations or other information relevant to compliance with this section at any time.

(r) **Recordkeeping.**

(1) Owners or operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this section for an underground storage tank until released from the requirements of section 22a-449 (d)-109 of these regulations under subsection 22a-449 (d)-109 (t) of these regulations. An owner or operator shall maintain such evidence at the underground storage tank site or the owner's or operator's place of business. Records maintained off-site shall be made available upon request of the implementing agency.

(2) An owner or operator shall maintain the following types of evidence of financial responsibility:

(A) An owner or operator using an assurance mechanism specified in subsections 22a-449 (d)-109 (f) to (k), inclusive, or subsection 22a-449 (d)-109 (m) of these regulations shall maintain a copy of the instrument worded as specified.

(B) An owner or operator using a financial test or guarantee shall maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year. Such evidence shall be on file no later than 120 days after the close of the financial reporting year.

(C) An owner or operator using a guarantee, surety bond, or letter of credit shall maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(D) An owner or operator using an insurance policy or risk retention group coverage shall maintain a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements.

(E) An owner or operator covered by a state fund or other state assurance shall maintain on file a copy of any evidence of coverage supplied by or required by the State under subdivision 22a-449 (d)-109 (*l*) (4) of these regulations.

(F) An owner or operator using an assurance mechanism specified in subsections 22a-449 (d)-109 (f) to (m), inclusive, of these regulations shall maintain an updated copy of a certification of financial responsibility worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF FINANCIAL RESPONSIBILITY

[Owner or operator] hereby certifies that it is in compliance with the requirements of section 22a-449 (d)-109 of these regulations.

The financial assurance mechanism[s] used to demonstrate financial responsibility under section 22a-449 (d)-109 of these regulations is [are] as follows:

[For each mechanism, list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and whether the mechanism covers ''taking corrective action'' and/or ''compensating third parties for bodily injury and property damage caused by'' either ''sudden accidental releases'' or ''nonsudden accidental releases'' or ''accidental releases.''']

[Signature of owner or operator]

[Name of owner or operator]

[Title]

[Date]

[Signature of witness or notary]

[Name of witness or notary]

[Date]

The owner or operator shall update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change(s).

(s) **Drawing on financial assurance mechanisms.**

(1) The Director of the implementing agency shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the Director, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if:

(A) (i) The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and

(ii) The Director determines or suspects that a release from an underground storage tank covered by the mechanism has occurred and so notifies the owner or operator or the owner or operator has notified the Director pursuant to sections 22a-449 (d)-105 or 106 of these regulations of a release from an underground storage tank covered by the mechanism; or

(B) The conditions of subdivisions 22a-449 (d)-109 (s) (2) (A) or (2) (B) (i) or (2) (B) (ii) of these regulations are satisfied.

(2) The Director of the implementing agency may draw on a standby trust fund when:

(A) The Director makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under section 22a-449 (d)-106 of these regulations; or

(B) The Director has received either:

(i) Certification from the owner or operator and the third-party liability claimant(s) and from attorneys representing the owner or operator and the third-party liability claimant(s) that a third-party liability claim should be paid. The certification shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF VALID CLAIM

The undersigned, as principals and as legal representatives of [insert owner or operator] and [insert name and address of third-party claimant], hereby certify that the claim of bodily injury [and/or] property damage caused by an accidental release arising from operating [owner's or operator's] underground storage tank should be paid in the amount of $[_____].

[Signatures]

Owner or Operator

Attorney for Owner or Operator

(Notary) Date

[Signature(s)]

Claimant(s)

Attorney(s) for Claimant(s)

(Notary) Date

or

(ii) A valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under section 22a-449 (d)-109 of these regulations and the Director determines that the owner or operator has not satisfied the judgment.

(3) If the Director of the implementing agency determines that the amount of corrective action costs and third-party liability claims eligible for payment subdivision 22a-449 (d)-109 (s) (2) of these regulations may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The Director shall pay third-party liability claims in the order in which the Director receives certifications under subdivision 22a-449 (d)-109 (s) (2) (B) (i) of these regulations, and valid court orders under subdivision 22a-449 (d)-109 (s) (2) (B) (ii) of these regulations.

(t) **Release from the requirements.**

An owner or operator is no longer required to maintain financial responsibility under this section for an underground storage tank after the tank has been properly closed or, if corrective action is required, after corrective action has been completed

and the tank has been properly closed as required by section 22a-449 (d)-107 of these regulations.

(u) **Bankruptcy or other incapacity of owner or operator or provider of financial assurance.**

(1) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, the owner or operator shall notify the Director of the implementing agency by certified mail of such commencement and submit the appropriate forms listed in subdivision 22a-449 (d)-109 (r) (2) of these regulations documenting current financial responsibility.

(2) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in subsection 22a-449 (d)-109 (g) of these regulations.

(3) An owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance shall be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, letter of credit, or state-required mechanism. The owner or operator shall obtain alternate financial assurance as specified in section 22a-449 (d)-109 of these regulations within 30 days after receiving notice of such an event. If the owner or operator does not obtain alternate coverage within 30 days after such notification, he shall notify the Director of the implementing agency.

(4) Within 30 days after receipt of notification that a state fund or other state assurance has become incapable of paying for assured corrective action or third-party compensation costs, the owner or operator shall obtain alternate financial assurance.

(v) **Replenishment of guarantees, letters of credit, or surety bonds.**

(1) If at any time after a standby trust is funded upon the instruction of the Director of the implementing agency with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner or operator shall by the anniversary date of the financial mechanism from which the funds were drawn:

(A) Replenish the value of financial assurance to equal the full amount of coverage required, or

(B) Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.

(2) For purposes of subsection 22a-449 (d)-109 (v) hese regulations, the full amount of coverage required is the amount of coverage to be provided by subsection 22a-449 (d)-109 (d) of these regulations. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

(w) **Suspension of enforcement.** [Reserved]

(x) **40 CFR Part 280.** Appendix I is incorporated by reference in its entirety.

(y) **Appendix II to Part 40 CFR 280-List of Agencies Designated To Receive Notifications**

Connecticut (State Form), Hazardous Materials Management Unit, Department of Environmental Protection, State Office Building, 79 Elm Street, Hartford, Connecticut 06106

(z) **Appendix III to 40 CFR Part 280-Statement for Shipping Tickets and Invoices**

A Federal law, the Resource Conservation and Recovery Act (RCRA), as amended (Pub. L. 98-616), requires owners of certain underground storage tanks to notify designated State or local agencies by May 8, 1986, of the existence of their tanks. Notifications for tanks brought into use after May 8, 1986, shall be made within 30 days. Consult EPA's regulations, issued on November 8, 1985 (40 CFR part 280) to determine if you are affected by this law.

(Effective July 28, 1994)

Sec. 22a-449 (d)-110. UST system upgrading, abandonment and removal date

(a) **Petroleum UST system of which construction or installation began prior to November 1, 1985.**

No owner or operator of a petroleum UST system of which construction or installation began prior to November 1, 1985, shall use or operate any component of that UST system beyond September 1, 1989, or for longer than five years beyond its life expectancy as determined in accordance with section 22a-449 (d)-111 of these regulations, whichever date is later, but in no event later than December 22, 1998, unless such component is modified so as to comply with the standards for new UST systems specified in subdivisions 22a-449 (d)-102 (a) (1), (2), (3), (4), and (10) of these regulations. If life expectancy has not been determined in accordance with section 22a-449 (d)-111 of these regulations, such component shall not be used or operated unless such component is modified so as to comply with the standards for new UST systems specified in subdivisions 22a-449 (d)-102 (a) (1), (2), (3), (4) and (10) of these regulations. Not later than December 22, 1998 all existing UST systems shall be modified to comply with standards specified in subdivision 22a-449 (d)-102 (a) (5) of these regulations. If the UST system is not so modified in accordance with this subsection, it shall be removed or abandoned in accordance with the procedures specified in NFPA 30 and also as of December 22, 1988, the closure requirements in section 22a-449 (d)-107 of these regulations including applicable requirements for corrective action in section 22a-449 (d)-106 of the regulations.

(b) **Hazardous substance UST system of which construction or installation began prior to December 22, 1988.**

No owner or operator of a hazardous substance UST system of which construction or installation began prior to December 22, 1988, shall use or operate any component of that UST system beyond four years after the effective date of these regulations or for longer than five years beyond its life expectancy as determined in accordance with section 22a-449 (d)-111 of these regulations, whichever is later, but in no event later than December 22, 1998, provided however, that for UST systems used for the storage of benzene that date shall not be beyond September 1, 1989, or five years beyond the life expectancy, whichever is later, unless such component is modified so as to comply with the standards for new UST systems specified in subsection 22a-449 (d)-102 (a) of these regulations. The owner or operator of a hazardous UST system component for which the date of initial installation cannot be documented to the satisfaction of the commissioner and the life expectancy cannot be determined in accordance with section 22a-449 (d)-111 of these regulations, shall not use or operate such component beyond four years after the effective date of these regulations unless such component is modified so as to comply with the standards for new UST systems specified in subsection 22a-449 (d)-102 (a) of these regulations. If the UST system is not so modified in accordance with this subsection,

it shall be removed or abandoned in accordance with the applicable procedures specified in NFPA 30 and as of December 22, 1988, the closure requirements in section 22a-449 (d)-107 of these regulations including applicable requirements for corrective action in section 22a-449 (d)-106 of these regulations.

(c) **UST systems which comply with the standards specified in subsection 22a-449 (d)-102 (a) of these regulations.**

No owner or operator of an UST system which complies with the standards specified in subsection 22a-449 (d)-102 (a) of these regulations shall use or operate any component of that UST system beyond its life expectancy as determined in accordance with section 22a-449 (d)-111 of these regulations. Prior to the last day of the life expectancy of a facility component, the owner or operator shall remove or abandon the UST system component in accordance with the procedures specified in NFPA 30 and the closure requirements in section 22a-449 (d)-107 of these regulations including applicable requirements for corrective action in section 22a-449 (d)-106 of these regulations.

(Effective July 28, 1994)

Sec. 22a-449 (d)-111. Life expectancy

(a) This subsection, in conjunction with subdivision 22a-449 (d)-104 (b) (2) and subsections 22a-449 (d)-104 (a), (c), (d), (e), (f) and (g) of these regulations specifies when a tank tightness test and line tightness test shall be performed, and when the owner and operator shall discontinue use of an UST system component in accordance with section 22a-449 (d)-110 of these regulations.

(b) **Life expectancy determinations shall be conducted as follows:**

(1) Life expectancy determinations shall be conducted for components of petroleum UST systems, the construction or installation of which begins on or after November 1, 1985, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another, within thirty (30) days following completion of installation or substantial modification of the component; and shall be conducted for components of petroleum UST systems, the construction or installation of which began prior to November 1, 1985, by May 8, 1986; as specified in subsection 22a-449 (d)-102 (b) of these regulations.

(2) Life expectancy determinations shall be conducted for components of hazardous substance UST systems, the construction or installation of which begins on or after the effective date of these regulations, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another, within thirty (30) days following completion of installation or substantial modification of the component; and shall be conducted for components of hazardous substance UST systems, the construction or installation of which began prior to the effective date of these regulations, by 180 days after the effective date of these regulations; as specified in subsection 22a-449 (d)-102 (c) of these regulations.

(3) Life expectancy determinations shall not be required for underground vent and vapor recovery piping.

(c) **Life expectancy shall be as follows:**

(1) For fiberglass-reinforced plastic (FRP) UST system components, the period of the manufacturer's corrosion or structural warranty, whichever is shorter.

(2) For cathodically protected UST system components that meet the requirements of subsection 22a-449 (d)-102 (a) of these regulations, the period of the manufacturer's corrosion or structural warranty, whichever is shorter, or the life expectancy of the existing or replacement anode(s) as calculated using standard formulae approved in writing by the commissioner. If the cathodic protection system malfunc-

tions or fails to meet the structure to soil test voltage requirement in subsection 22a-449 (d)-103 (b) of these regulations, and is not repaired or replaced within thirty (30) days, the life expectancy of the UST system components protected by the system shall be reestablished in accordance with either subdivision 22a-449 (d)-111 (c) (3) or subsection 22a-449 (d)-111 (d) of these regulations. If life expectancy shall be reestablished in accordance with subdivision 22a-449 (d)-111 (c) (3) of these regulations, the period specified by subdivision 22a-449 (d)-111 (c) (3) of these regulations shall be deemed to have begun on the earliest date of malfunction or the earliest date on which the structure to soil test voltage reading was less negative than minus 0.85 volts, as applicable, provided that the period specified by subdivision 22a-449 (d)-111 (c) (3) of these regulations shall not extend beyond the last day of the component's initial life expectancy period.

(3) For UST system components not covered in subdivision 22a-449 (d)-111 (c) (1) of these regulations and subdivision 22a-449 (d)-111 (c) (2) of these regulations, fifteen years from the date of installation. If the date of installation cannot be documented, the life expectancy shall be determined by a method approved by the commissioner in writing.

(d) The life expectancy of an UST system component may be determined by a method other than those set forth in subsection 22a-449 (d)-111 (c) of these regulations upon written approval of the commissioner.

(Effective July 28, 1994)

Sec. 22a-449 (d)-112. UST system location transfer

No component of an UST system shall be moved from one location to another without prior written approval of the commissioner.

(Effective July 28, 1994)

Sec. 22a-449 (d)-113. Transfer of UST system ownership, possession or control

(a) As of November 1, 1985, no owner or operator shall transfer ownership, possession or control of any petroleum UST system without full disclosure to the transferee of the status of the UST system with respect to compliance with these regulations at least fifteen (15) days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to subsection 22a-449 (d)-102 (b) of these regulations and, as of the effective date of these regulations, such disclosure shall include an up-to-date copy of all information submitted to the commissioner pursuant to section 22a-449 (d)-102 of these regulations.

(b) As of the effective date of these regulations, no owner or operator shall transfer ownership, possession or control of any hazardous substance UST system without full disclosure to the transferee of the status of the UST system with respect to compliance with these regulations at least fifteen (15) days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to section 22a-449 (d)-102 of these regulations.

(Effective July 28, 1994)

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Underground Storage Tank Petroleum Clean-Up Fund

Sec. 22a-449e-1. Underground storage tank petroleum clean-up fund

As used in this section:

(a) **Definitions**

''Applicant'' means an owner or operator of any one or combination of underground storage tank systems used to contain motor fuels or used to contain heating fuels for other than consumptive use on the premises which were subject to or would have been subject to demonstration of financial responsibility under 40 CFR Part 280.90 et seq. as said regulation was published in the federal register of October 26, 1988.

''Board'' means the underground storage tank petroleum clean-up fund review board established under section 22a-449d of the general statutes.

''Commissioner'' means the commissioner of environmental protection or his or her designated agent.

''Department'' means the department of environmental protection.

''Fund'' means the underground storage tank petroleum clean-up fund established under section 22a-449c of the general statutes.

(b) **Organization of the board**

(1) Meetings. Regular meetings of the board shall be held at a time and at a location to be determined by the board and kept on file with the Office of the Secretary of State in Hartford, Connecticut. A meeting of the board may be recessed to a time and place certain. Special meetings of the board shall be held at the call of the chairperson or at the call of any three members of the board, at the time and place designated in the call.

(2) Quorums. The presence of at least seven (7) members of the board shall constitute a quorum at any meeting of the board. A decision to approve a claim submitted pursuant to this regulation shall be by majority vote of the board members present and voting. Any vote for a decision to approve a claim submitted pursuant to this regulation which does not result in a majority vote of the board members present and voting shall be deemed a denial of that claim.

(3) Election of Officers. The members of the board shall elect annually, from their number, a chairperson who shall preside at meetings of the board, a vice-chairperson who shall preside at meetings of the board in the absence of the chairperson, and a secretary who shall maintain minutes of all board meetings.

(4) Application Procedure. Applications for reimbursement or payment submitted pursuant to section 22a-449f of the general statutes shall be mailed or personally delivered to the Office of the Commissioner of Environmental Protection in Hartford, Connecticut or such other agent as designated by the board.

(c) **Notification to Eligible Parties**

The board shall notify eligible parties of the existence of the Underground Storage Tank Petroleum Clean-up fund as follows:

(1) A notice to owners and operators of underground storage tanks who have filed notifications with the commissioner pursuant to section 22a-449 (d)-1 (d) of the regulations of Connecticut state agencies shall be mailed within sixty (60) days after the adoption of these regulations.

(2) A notice shall be distributed concurrently with the dissemination of forms for notification of underground storage tank facilities pursuant to section 22a-449 (d)-1 (d) of the regulations of Connecticut state agencies.

(d) **Eligible Costs**

Eligible costs shall include reasonable costs incurred as a result of a release or suspected release, provided such costs resulted from activities which were performed in accordance with all applicable laws, and shall include costs incurred for, but not limited to, the following activities:

(1) Implementation of emergency mitigative actions including, but not limited to, actions taken to:

(A) eliminate sources of pollution;

(B) prevent or abate imminent fire or explosion hazards;

(C) intercept and recover free petroleum; and

(D) remove, store for an interim period and dispose of polluted soils.

(2) Preparation and submittal to the commissioner of a proposed investigative scope of study which includes, but is not limited to:

(A) locations and depths of ground water monitoring wells;

(B) locations of soil and surface water sampling;

(C) a sampling and analytical program, including parameters to be tested, sampling and analytical methods, and quality assurance and quality control procedures; and

(D) a schedule and cost estimate for conducting the investigation.

(3) Conducting an investigation to characterize the existing and potential extent and degree of soil, air, surface water and ground water pollution.

(4) Preparation and submittal to the commissioner of an engineering report which includes, but is not limited to, the following:

(A) a detailed description of the investigation performed;

(B) an analysis of the existing and potential extent and degree of soil, air, surface water and ground water pollution which is on, is emanating from or has emanated from the site;

(C) an evaluation of alternatives for remedial actions to abate such pollution;

(D) proposal of a preferred alternative with supporting justification;

(E) proposal of a detailed program and schedule to implement the preferred remedial actions;

(F) proposal of soil, air, surface water and ground water monitoring programs to determine the degree to which the remedial actions have been effective, and a schedule for performing all monitoring; and

(G) a cost estimate for implementation of the preferred remedial action strategy.

(5) Preparation of contract plans and specifications for remedial actions, and actions necessary to obtain all permits required for such actions, including any reasonable legal or technical fees necessary for such actions.

(6) Performance of remedial actions.

(7) Performance of studies and monitoring programs to determine the effectiveness of the remedial actions.

(8) Payment of third party claims for bodily injury, property damage and damage to natural resources.

(e) **Records Required for Submission of Claims**

(1) All applications for costs incurred other than those applications specified in subdivision (2) of this subsection shall be submitted on forms prescribed by the board to the commissioner of environmental protection or another agent designated by the board, and shall include the following records and information:

(A) location of the underground storage tank system from which the release emanated, or from which a release was suspected to have emanated;

(B) name, address and telephone number of each owner and operator of the underground storage tank system from which the release emanated or from which a release was suspected to have emanated;

(C) date and method of discovery of the release;

(D) date the release was reported to the department and to the board;

(E) what the applicant believes to be the cause of the release and all information documenting the basis for that belief;

(F) estimated amount and type of petroleum released;

(G) facility component or components, including registration numbers of components, responsible for the release;

(H) description of the services rendered and the dates of services rendered, and copies of all bills for costs incurred as a result of the release or of a suspected release, indicating whether or not such costs have been paid, and which costs represent the first ten thousand dollars borne by the responsible party;

(I) a demonstration that the costs incurred were the result of a release or suspected release from an underground storage tank system, and that the system was one for which the responsible party was or would have been required to demonstrate financial responsibility under 40 CFR Part 280.90 et seq., as published in the Federal Register of October 26, 1988;

(J) for costs other than those associated with legal representation, medical services or emergency mitigative actions, and other than for activities occurring prior to the adoption of these regulations or performed by consultants who were retained prior to the adoption of these regulations, a description of the process used to obtain three (3) written bids for services rendered, copies of those bids and reason(s) specified if any lower bid was not selected. This requirement shall apply only to those investigatory or remedial services performed which exceed five thousand dollars in cost;

(K) copies of all required notifications, as required by section 22a-449 (d)-1 (d) of the regulations of Connecticut state agencies, submitted to the department as notification of the underground storage tank system from which the release or suspected release emanated and the reasons for failure to submit any notifications to the department as required by section 22a-449 (d)-1 (d) of the regulations of Connecticut state agencies;

(L) report from a consultant as to the responsible party's compliance status, for a period of at least three years immediately prior to the date of the release or suspected release, with regard to those provisions of the general statutes and regulations of Connecticut state agencies governing the installation, operation and maintenance of underground storage tanks. Such report shall include verification of compliance or a description of the date, nature, extent and degree of each violation;

(M) copies of all certifications, if any, by the commissioner that the elements described in subdivisions (1) through (7) of subsection (d) have been performed to the satisfaction of the commissioner;

(N) copies of any approvals, permits, orders, notices of violation, or lawsuits including referrals for civil action issued by the commissioner regarding the site;

(O) verification that the responsible party has borne the first ten thousand dollars of all costs of the release;

(P) for applications relating to third party claims, the information specified in subparagraphs (B), (C), (F) and (G) of subdivision (2) of this subsection;

(Q) signature of the applicant, and the individual or individuals responsible for actually preparing the application, who shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals immediately responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense;'' and

(R) date the application was completed and signed.

(2) All applications to the board which are submitted only by third parties for bodily injury, property damage or damage to natural resources suffered by them shall be submitted on forms prescribed by the board to the commissioner of environmental protection, or another agent designated by the board, and shall include the following records and information:

(A) location of the underground storage tank system from which the release emanated, or from which a release was suspected to have emanated;

(B) nature of the claim for bodily injury, property damage or damage to natural resources and date on which the injury or damage was discovered;

(C) evidence that the claim was finally adjudicated or settled with the prior written approval of the board before an application for reimbursement or payment was made;

(D) description of the services rendered and the dates of services rendered, and copies of all bills for costs incurred as a result of the release or of the suspected release, indicating whether or not such costs have been paid, and which costs represent the first ten thousand dollars borne by the responsible party;

(E) for costs other than those associated with legal representation, medical services or emergency mitigative actions, and other than for activities occurring prior to the adoption of these regulations or performed by consultants who were retained prior to the adoption of these regulations, a description of the process used to obtain three (3) written bids for services rendered, copies of those bids and reason(s) specified if any lower bid was not selected. This requirement shall apply only to those services performed which exceed five thousand dollars in cost;

(F) certifications from licensed professionals substantiating third party claims for bodily injury, property damage and damage to natural resources, including, but not limited to, statements from licensed physicians, claims adjusters and attorneys;

(G) all documents relating to attempts by the applicant to recover costs from the responsible party, and evidence that the responsible party notified the board as soon as practicable of the release and of any third party claim resulting from the release;

(H) signature of the applicant, and the individual or individuals responsible for actually preparing the application, who shall certify in writing as follows:

''I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals immediately responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense;''

(I) date the application was completed and signed.

(3) The board may at any time require a responsible party or an applicant to submit additional information which the board deems necessary to act upon an application. The board may reject an application for failure to submit such required information.

(4) An applicant may submit supplemental claims for payment or reimbursement as new costs are incurred in connection with a release or suspected release. Such supplemental applications to the board shall be submitted on forms prescribed by the board and shall include such records and information as required in subdivision (1) or (2) of this subsection as the board deems necessary.

(5) Within fifteen (15) days of the date an applicant, individual, or individuals responsible for actually preparing an application becomes aware of a change in any information submitted to the board under these regulations, or that any such information was inaccurate or misleading or that any relevant information was omitted, the applicant, individual, or individuals shall submit the correct or omitted information to the board.

(f) **Procedures for Application Review**

(1) Upon filing of an application, the commissioner or another agent designated by the board shall determine if the application complies with the requirements of subdivision (1) or (2) of subsection (e).

(2) An application shall only be deemed complete by the commissioner or another agent designated by the board upon satisfactory fulfillment of the requirements of subdivision (1) or (2) of subsection (e).

(3) Upon receipt of a complete application, the board shall take the following actions:

(A) Refer the application to the commissioner who shall:

(i) evaluate whether the costs were incurred after July 5, 1989, and if the release or suspected release was from an underground storage tank system for which the responsible party was or would have been required to demonstrate financial responsibility under 40 CFR Part 280.90 et seq. as said regulation was published in the federal register of October 26, 1988.

(ii) evaluate whether the underground storage tank system from which a release emanated was subject to the notification procedures of section 22a-449 of the general statutes, whether such a notification was completed and, if such notification was not completed, whether the responsible party knowingly and intentionally failed to notify the commissioner;

(iii) evaluate whether the release resulted from a reckless, wilful, wanton or intentional act or omission of a responsible party;

(iv) evaluate whether the release occurred from an underground storage tank system which, at the time of the release, was not in compliance with an order issued by the commissioner or with the general statutes and regulations governing the installation, operation and maintenance of underground storage tanks and such lack of compliance was a proximate cause of such release;

(v) determine whether the first ten thousand dollars of costs of the release have been borne by the responsible party;

(vi) determine whether third party claims were finally adjudicated or settled with the prior written approval of the board before application for reimbursement or payment was made to the board;

(vii) evaluate whether grounds for recovery under section 22a-449f (b) of the general statutes exist, in which case section 22a-449f (a) prohibits the board from ordering reimbursement or payment from the fund;

(viii) review and investigate any or all requests for reimbursement or payment by a responsible party for costs other than third party claims for bodily injury and property damage.

(ix) evaluate the eligibility of the applicant for payment of costs incurred and/or reimbursement of costs paid, and in the case of a third party applicant, the eligibility of the applicant for payment or reimbursement of claims for bodily injury, property damage and/or damage to natural resources;

(x) evaluate whether some or all of the costs incurred and/or paid were incurred as a result of a release or a suspected release;

(xi) evaluate, based on costs and standards prevalent in the relevant market or industry or other relevant information, whether some or all of the costs incurred were reasonable in amount for the goods and/or services provided;

(xii) determine whether proper notice of the release and of third party claims has been provided to the board as soon as practicable; and

(xiii) prepare a written report of such review and investigation including his or her evaluation and recommendations for the board to act on such application.

(B) Refer the application or portions of the application to a consultant who is under contract to the commissioner for a review and investigation pursuant to subdivision (3) of this subsection for a review and investigation of any or all requests for payment of claims by third parties for bodily injury, or the amount of claims for property damage. The consultant shall submit to the board a written report of such review and investigation, of the conclusions reached and of the recommendations of such consultant for action by the board on such application.

(4) The board shall render a decision not more than forty-five (45) days after the date an application is received by the commissioner, or another agent designated by the board for the receipt of applications, provided such application included all information required by subdivision (1) or (2) of subsection (e) when received. Any decision of the board shall briefly state the grounds for any denial and shall be deemed issued upon deposit in the mail.

(g) **Payment of Claims**

(1) Upon authorization of the board, the commissioner shall reimburse the applicant for authorized costs or make payment to vendors for services rendered. Payments shall be made based upon the availability of monies in the fund. In the event that sufficient monies do not exist in the fund to make reimbursements, the commissioner shall retain the outstanding claims and shall make future payments pending availability of monies in the fund. Such payments shall be processed based upon the date the claim was approved by the board in order of approval date, the oldest approved claim processed first.

(2) Where costs incurred may be of a continuing nature, the applicant may submit monthly requests for payment on a form provided by the board. The form shall indicate a documented accounting of expenses authorized, cumulative expenses to date, cumulative payments received to date, and verification of payments made. The minimum monthly payment shall not be less than five thousand dollars ($5,000.00) unless the total cost authorized for payment does not exceed five thousand dollars ($5,000.00). The board may, at its discretion, preauthorize such ongoing costs for a period not to exceed twelve (12) months.

(h) **Assistance rendered to the board by the commissioner of environmental protection**

The commissioner may provide the following services to the board:

(1) Notify eligible parties of the existence of the fund in accordance with subsection (c) of these regulations:

(2) Receive, review and investigate applications for claims;

(3) Prepare reports and recommendations on applications;

(4) Maintain records, information, applications and minutes of board meetings as well as other administrative records, as needed;

(5) Contract with consultants for those services necessary for the board to perform its function as provided in section 22a-449c of the general statutes and these regulations, the costs of such contractual services to be funded as administrative costs as provided in section 22a-449c of the general statutes, as amended by section 1 of Public Act 91-254;

(6) Provide other administrative services, as needed, for the board to perform its function as provided in section 22a-449a to section 22a-449h, inclusive, of the general statutes.

(Effective October 4, 1991)

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Repealed 22a-451-1

Grants to Municipalities for Potable Water Supplies

Sec. 22a-451-1.

Repealed, June 23, 1986.
See § 22a-471-1.

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Permit Fees for Hazardous Materials Management

Hazardous materials management permit fees 22a-454-1

Permit Fees for Hazardous Materials Management

Sec. 22a-454-1. Hazardous materials management permit fees

(a) **Method and timing of payment.** An applicant or permittee shall submit all fees required by this section by certified check or money order payable to the Department of Environmental Protection. Any fee required by this section shall be due upon the submission of the application or request to which it relates. Any application or request shall not be deemed complete and will not be reviewed until all fees required by this section have been paid in full.

(b) **Application Fee.** The fee for submitting an application or for revoking and reissuing, or renewing a permit required by section 22a-454 of the Connecticut General Statutes shall be as follows:

(1) For a transporter permit, five hundred dollars ($500.00) per year for each year or portion thereof that the permit authorizes the transportation of hazardous waste;

(2) For a contractor's permit, five hundred dollars ($500.00) per year for each year or portion thereof that the permit authorizes a person to act as a contractor;

(3) For storage of hazardous waste or for transferring hazardous waste from one vehicle to another or from one mode of transportation to another, fourteen thousand dollars ($14,000) if the storage or transfer activity meets any of the following criteria:

(i) the waste has a signal rating of 3 or 4 under any of the listed categories (i.e., health hazard, flammability or reactivity) of the National Fire Protection Association (NFPA) 704 Standard System for the Identification of the Fire Hazards of Materials;

(ii) 1,000 gallons, or an equivalent weight or volume, or more of hazardous waste is stored at any one time;

(iii) there is a 2,000 gallons or more throughput of hazardous waste in any 24 hour period; or

(iv) more than three different types of hazardous waste will be stored.

(4) For storage of hazardous waste or for transferring hazardous waste from one vehicle to another or from one mode of transportation to another, seven thousand dollars ($7,000) if the storage or transfer does not meet any of the criteria specified in subdivision (3) of this subsection and includes the transfer of hazardous waste from the original container to another container; and

(5) For storage of hazardous waste or for transferring hazardous waste from one vehicle to another or from one mode of transportation to another, two thousand, five-hundred dollars ($2,500) if the storage or transfer does not meet any of the criteria specified in subdivision (3) of this subsection and the hazardous waste remains in its original container.

(c) **Modification fee**. The fee for applying for the following modifications to a permit issued under section 22a-454 of the Connecticut General Statutes shall be as follows:

(1) For a change in the type of hazardous waste to be transported under a transporter permit – one hundred dollars ($100.00);

(2) For modification to a permit, other than a transporter permit, of a type listed as a class I permit modification that does not require the approval of the commissioner – two hundred and fifty dollars ($250.00); and

(3) For modification to a permit, other than a transporter permit, of a type listed as a class I permit modification that requires the approval of the commissioner – five hundred dollars ($500.00).

For purposes of this subsection, ''Class I'' shall mean permit modifications designated as class I in Appendix I to 40 CFR 270.42.

(d) **Transfer Fee**. The fee to transfer any permit issued pursuant to section 22a-454 of the Connecticut General Statutes shall be the fee prescribed by section 22a-6o of the Connecticut General Statutes.

(e) **Waiver**. All fees required by this section may be waived for agencies, boards, commissions, councils and departments of the state of Connecticut as provided in section 22a-6f of the Connecticut General Statutes.

(f) **Municipal permittee.** All fees charged to a municipality pursuant to this section shall be fifty percent of the fee charged to other applicants.

(g) **Relationship to statutory fees.** Other than the fees specified in this section, nothing in this section shall affect the fees specified in the Connecticut General Statutes.

(h) **Multiple Fees.** Any person required to pay more than one fee (i.e., for multiple permits or multiple applications or requests requiring payment of a fee) shall pay the fee calculated by adding each fee associated with each application request or permit requiring payment of a fee. In calculating the total fee, each permit application or request requiring payment of a fee shall be added separately, even if an applicant or requester files one application seeking multiple permits or one request containing multiple requests.

(Effective November 23, 1988; amended October 31, 2001)

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Sewage System Additives and Detergents

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Sewage System Additives and Detergents

Sec. 22a-462-1. Definitions

''Ban'' means a prohibition of selling, offering or exposing for sale, giving, furnishing or using any detergent, synthetic detergent or sewage system additive.

''Distributor'' means a person who gives, furnishes, sells, or offers or exposes for sale any detergent, synthetic detergent or sewage system additive.

''Eutrophication'' means the process of aging of a lake, pond or other body of water due to nutrient enrichment.

''Manufacturer'' means a person who produces any detergent, synthetic detergent or sewage system additive.

(Effective May 21, 1984)

Sec. 22a-462-2. Banning of detergents

(a) If the Commissioner determines that the use of any detergent in an area of the state is resulting in pollution of the waters of the state or can reasonably be expected to result in pollution of the waters of the state or is a significant factor in the accelerated eutrophication of a lake, pond, or other body of water in the state, he shall notify the manufacturer of the detergent and the chief executive officer of each municipality in the affected area of his intent to ban the detergent in that area. Such notice shall be sent by certified mail, return receipt requested, and shall (1) conform to the requirements of subsection (d) of this section, (2) state that the manufacturer or municipality may request a hearing within thirty days from the date the notice was issued, and (3) be published in a newspaper of general circulation in the area affected.

(b) Any person aggrieved by a proposal to ban a detergent pursuant to Section 22a-461 of the General Statutes may, within thirty days from the date the notice of intent is issued, request a hearing. The Commissioner shall hold a hearing if so requested. After the hearing the Commissioner shall consider all information presented, including but not limited to information related to technical feasibility, the chemical content of the product(s) to be banned, or a proposal to reformulate the detergent to omit the ingredient which is causing or adding to the pollution or accelerated eutrophication to comply with Section 22a-460 through 22a-462 inclusive of the General Statutes. The Commissioner shall inform the manufacturer and all parties to the hearing by certified mail, return receipt requested, that the notice of intent has been affirmed, affirmed as revised in accordance with information received, or rescinded.

(c) If no request for a hearing is received as provided for in subsection (b) of this section, or if after a hearing the Commissioner affirms his notice of intent to ban or affirms it as revised, a notice of the banning of the detergent shall be sent to the manufacturer by certified mail, return receipt requested, and mailed to all known distributors. Notice shall subsequently be published in a newspaper of general circulation in the area affected by the ban. Each notice shall conform to the requirements of subsection (d) of this section. The ban shall be effective as of the date of newspaper publication.

(d) Each notice required by these regulations shall include but need not be limited to the following:

(1) the name of the detergent to be banned,

(2) the ingredient of the detergent which is causing or adding to the pollution or accelerated eutrophication,

(3) a description of the area in which the detergent will be banned,

(4) the statutory authority for the ban,
(5) the reason for the ban,
(6) the actions which constitute a violation of the ban,
(7) the penalty for violation of the ban, and
(8) a statement that the ban is effective upon publication in a newspaper of general circulation in the area affected.
(Effective May 21, 1984)

Sec. 22a-462-3. Registration and labeling of sewage system additives

(a) No person shall, after July 1, 1984, give, furnish, sell, offer or expose for sale, or use any sewage system additive as defined in Section 22a-460 of the General Statutes, as amended, until such sewage system additive is registered with the Commissioner and bears the labeling required by subsection (c) of this section.

(b) Registration of a sewage system additive shall be made by the manufacturer or distributor on a form provided by the Commissioner. The registration and application form shall include the name and address of the manufacturer, the name of the sewage system additive, a complete chemical analysis of the sewage system additive including but not limited to an analysis of toxic pollutants as specified in Section 22a-461 of the General Statutes, and other information which the Commissioner deems necessary.

(c) The manufacturer or distributor of a sewage system additive shall state clearly and legibly on each container, wrapper or other packaging of the additive:

''This sewage system additive is registered with the Connecticut Commissioner of Environmental Protection. The manufacturer's analysis states that this product contains no toxic pollutants. The Commissioner in no way certifies the safety or effectiveness of this product.''

(d) Any alteration of the chemical content of a sewage system additive shall constitute the formulation of a new product. This product shall not be given, furnished, sold, offered or exposed for sale or used until it is registered and bears the labeling required by subsection (c) of this Section.
(Effective May 21, 1984)

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Grants to Municipalities and Water Companies for Potable Water Supplies

Grants to municipalities and water companies for potable water supplies 22a-471-1

Grants to Municipalities and Water Companies for Potable Water Supplies

Sec. 22a-471-1. Grants to municipalities and water companies for potable water supplies

(a) **Definitions**

(1) ''Potable Water Supply Facilities'' or ''Facilities'' means the necessary facilities to supply an area affected by contamination with potable drinking water.

(2) ''Operation and Maintenance'' means the activities required to assure the dependable and economical function of potable water supply facilities.

(3) ''Commissioner'' means the Commissioner of Environmental Protection.

(4) ''Municipality'' means any metropolitan district, town, consolidated town and city, consolidated town and borough, city, borough, village, fire and sewer district, sewer district and each municipal organization having authority to levy and collect taxes or make changes for its authorized function.

(b) **Eligibility**

(1) A municipality shall be eligible for funding of the cost of providing a short-term and long-term supply of potable water in instances where groundwater pollution has rendered existing supplies unusable for potable drinking water provided:

(A) (i) The Commissioner of Health Services determines that the extent of pollution creates or can reasonably be expected to create an unacceptable risk of injury to the health or safety of persons using such groundwaters as a public or private sources of water for drinking or other personal or domestic uses, and;

(ii) The Commissioner is unable to determine the person or municipality responsible or if he determines that the responsible persons have no assets other than land, buildings, business machinery or livestock and are unable to secure a loan at a reasonable rate of interest to provide potable drinking water and;

(iii) The Commissioner has ordered the municipality to supply short-term potable drinking water to existing residential buildings and elementary and secondary schools affected by such pollution and long-term provision of potable drinking water to all persons affected by such pollution in accordance with Section 22a-471 of the Connecticut General Statutes, as amended, or;

(B) The municipality fails to recover all expenses as specified in Section 22a-471 (b) (4) (B) (i) of the Connecticut General Statutes, as amended, from the responsible party.

(2) A water company shall be eligible for funding of the cost of providing the most cost effective long term method of rendering the water supply in question usable for potable drinking water provided:

(A) The Commissioner is unable to determine the person or municipality responsible or if he determines that the responsible persons have no assets other than land, buildings, business machinery or livestock and are unable to secure a loan at a reasonable rate of interest to provide potable drinking water and;

(B) The Commissioner, upon review of the required engineering report and after consultation with the Commissioner of Economic Development, determines that a grant is appropriate.

(c) **Levels of funding assistance**

(1) The grant to a municipality providing short-term potable water shall equal 100 percent of the costs;

(2) The grant to a municipality preparing the required engineering report and sampling and testing shall equal 100 percent of the costs;

(3) The grant to a municipality providing capital improvements, including the design and construction costs for the long-term provision of potable water, and monitoring and maintaining individual water treatment systems (during the first year following installation) shall be not less than 50 nor more than 75 percent of the costs; the exact percentage of funding for such costs incurred shall be established by ranking all municipalities in descending order according to such municipality's adjusted equalized net grand list per capita as defined in Section 10-261 of the Connecticut General Statutes, as amended and determining a percentage for each such municipality on a scale from not less than fifty percent to not more than seventy-five percent based upon such ranking;

Determination of the exact percentage of funding is derived by the following formula:

50% K plus x/169 times 25%K = Municipality's percentage of funding.

Where: x = municipality's ranking based on Sec. 10-261 of the General Statutes, as amended
169 = total number of Towns
K = Cost of capital improvements

(4) The grant to a water company preparing the required engineering report and sampling/testing shall equal 50 percent of the costs;

(5) The grant to a water company providing the most cost-effective long term method of rendering the water supply in question usable for potable drinking water shall equal 50 percent of the costs.

(d) **Grant Application Materials**

A municipality applying for State funding assistance shall file properly executed forms and applications prescribed by the Commissioner. In addition, the following supporting documentation shall be submitted:

(1) An application for the short-term supply of potable water and engineering report assistance may be filed before or after completion of the engineering report. The application shall be on forms prescribed by the Commissioner and shall include:

(A) A Plan of Study for the engineering report which shall include:

(i) Detailed description of the affected area, nature and extent of groundwater contamination and estimated duration of such contamination;

(ii) The nature, scope and methodology of the proposed study, including public participation and time of completion goals;

(iii) Itemized description of the costs of the engineering report including but not limited to sampling and testing costs;

(iv) A schedule for sampling and testing, and

(v) A schedule and associated costs for supplying short-term potable water.

(B) The proposed engineering agreement relating to performance of the required engineering tasks.

(C) A resolution, adopted by the municipality's governing board, authorizing a specific person to file the grant application and execute the agreement for the grant. This resolution must be certified and sealed by the Town or City Clerk.

(D) No grant assistance shall be allowed for any engineering work performed before a grant award without the prior written approval of the Commissioner.

(2) An application for the costs of the design and construction for the long-term capital improvements, and the monitoring and maintaining individual water treatment

systems (during the first year following installation) shall be on forms prescribed by the Commissioner and shall include:

(A) An engineering report meeting all the requirements set forth pursuant to (f);

(B) The executed engineering agreement for the performance of the engineering design and construction related activities;

(C) A resolution, adopted by the municipality's governing board, authorizing a specific individual to file the grant application and to execute the agreement for the grant. This resolution must be certified and sealed by the Town or City Clerk;

(D) A schedule detailing dates for design, construction, and commencement of operation;

(E) A statement of certification that the local share of funding has been legally authorized for design and construction activities;

(F) A statement from the Town or City Counsel that certifies all necessary easements have been acquired;

(G) Two copies of the contract plans and specifications for the review and approval of the Commissioner;

(H) If applicable, a fully executed contract between the municipality and the water company;

(I) Any other information that the Commissioner deems necessary; and

(J) No grant assistance shall be allowed for any engineering work performed before a grant award without the prior written approval of the Commissioner.

(e) **Terms of Funding Assistance**

(1) The Commissioner may condition grants as he deems appropriate.

(2) No grant award shall be made for a potable drinking water facility that would provide capacity for new connections or other developments to be located in environmentally sensitive land such as wetlands, floodplains, prime agricultural lands, or regulated coastal zones. Appropriate and effective grant conditions (e.g. restricting water hook-ups) should be used where necessary to protect these resources from new development.

(3) The award of grant assistance is for constructing, designing, reporting, and testing or sampling activities to correct existing contamination problems.

(4) Any approval of an engineering report or plans and specifications under this program shall not constitute a commitment or approval of construction funding.

(f) **Technical Program Elements**

(1) Engineering Report Requirements

Content of the engineering report shall be at the discretion of the Commissioner based on a pre-report conference with the municipality and its engineering consultant regarding the scope of services to be performed and the scope of the plan of study pursuant to (d) (1) (A). Engineering reports shall include, but are not limited to, the following, unless otherwise specified by the Commissioner:

(A) A detailed description of the existing and potentially affected area including the groundwater contamination problem and the population affected;

(B) A detailed analysis of alternative solutions including, but not limited to: community well systems; individual household filtration systems; new individual wells; and extension of existing water mains. This analysis of alternate solutions shall include: capital costs, operation and maintenance costs; monitoring costs; present worth comparisons of all costs utilizing a twenty year planning period and future development in accordance with the municipality's current zoning regulations; short-term and long-term environmental impacts of the recommended alternative; distribution of costs to the users and Town; relationships to Town and State plans

for land use and population growth including the Conservation Development Policies Plan; potential for future contamination; public acceptance; and the reliability of the alternatives;

(C) Design criteria on the viable alternatives considered;

(D) Sampling and testing results which identify the levels and types of contaminents; and contaminent migration analyses;

(E) For the recommended alternative, the following must be addressed:

(i) Estimated construction; operation and maintenance, and monitoring costs (identifying State and local shares) and a description of the manner in which local costs will be financed.

(ii) Cost impacts on users of the potable water supply system, including any assessments, connection costs, and operation and maintenance costs.

(F) A program for the maintaining and monitoring of potable water supply facilities including methods and duration of the program.

(2) Public Participation

(A) The scope and level of detail of the public participation program shall be determined during the development of the plan of study. At a minimum, prior to the acceptance by the municipality of the engineering report, the municipality must hold a public hearing to describe the proposed program and action and to assure that the public's concerns are considered.

(B) The time and place of the public hearing shall be published in a newspaper of general circulation in the municipality at least 10 days in advance, or for such longer period as may be required by local ordinance or charter. Copies of the engineering report must be made available for inspection by the public at least 10 days prior to the hearing.

(C) The Commissioner may waive the public hearing on an engineering report upon request in writing from the municipality stating that the public hearing would not serve the public interest.

(g) **Administrative Program Elements**

(1) Allowable Project Costs. Those costs associated with the planning, design and construction of potable water supply facilities eligible for State funding assistance include but are not limited to:

(A) Costs under approved construction contracts, except for those specific costs which are unallowable pursuant to subdivision (3) of this subsection.

(B) Engineering report costs directly related to the contamination problem.

(C) Costs of complying with the Connecticut Environmental Policy Act.

(D) Preparation of construction drawings, specifications, estimates, and construction contract documents;

(E) Development and preparation of an operation and maintenance manual, if deemed necessary by the Commissioner;

(F) Costs of complying with the procurement requirements of these regulations;

(G) Change orders and the costs of meritorious contractor claims for increased costs provided the costs were not caused by the municipality's mismanagement or vicarious liability for the improper action of others. Settlements, arbitration awards, and court judgments which resolve contractor claims shall be reviewed by the Commissioner and shall be allowable only to the extent that they were not caused by municipality mismanagement, are reasonable, and do not attempt to pass on to the State of Connecticut the costs of events that were the responsibility of the municipality, contractors, or others;

(H) Costs necessary to mitigate only direct adverse, or physical impacts resulting from the building of the potable water supply facilities;

(I) Replacement parts identified and approved in advance by the Commissioner as necessary to assure uninterrupted operation of the potable water supply facility, provided they are critical parts or major system components which are:

(i) Not immediately available and whose procurement involves an extended ''lead-time''; or

(ii) Identified as critical by the equipment supplier; or

(iii) Critical but not included in inventory provided by the equipment supplier.

(2) Allowable Project Costs, if Approved by the Commissioner,

(A) The cost of restoring streets and rights-of-way to their original condition. The need for such restoration must result directly from the construction and is generally limited to repaving the width of the trench.

(B) The following costs only when both are accomplished: the cost of individual water service connections from the service box to the water meter and the abandonment of wells in accordance with the Well Drilling Code Regulations Sec. 25-128-57 when water sampling indicates that pollution has rendered existing supplies unusable for potable drinking water, as determined by the Commissioner of Health Services.

(3) Unallowable Project Costs. Those costs which are not necessary for the construction of the potable water supply facilities are unallowable. Such costs include, but are not limited to:

(A) Basin or areawide planning not directly related to the project.

(B) Costs outside the scope of the approved project.

(C) Approval, preparation, issuance, and sale of bonds or other forms of indebtedness required to finance the project and the interest on them.

(D) The costs of acquisition (including associated legal, administrative, and engineering costs) of rights-of-way.

(E) Costs for which payment has been or will be received under any other assistance program or source in accordance with Section 22a-471 (b) (3) (A) or (B), of the Connecticut General Statutes, as amended.

(F) Preparation of applications and permits required by Federal, State, or local laws.

(G) The incremental cost of a potable water supply facility or any part thereof that would provide capacity for new habitation or other establishments to be located on environmentally sensitive land such as wetlands, floodplains, or prime agricultural lands.

(H) The incremental cost of a potable water supply facility that provides incremental capacity for fire flow protection.

(I) For those potable water supply facilities that may provide capacity beyond that necessary to serve the area of contaminated wells or the area of potential contamination, unallowable project costs shall be determined by the following formula:

$$\text{Amount of total construction contract cost which is unallowable} = \frac{(x - y)}{x} \text{ times } q \text{ times } \tfrac{2}{3}$$

Where: y = the hydraulic capacity of the minimum pipe size sufficient to serve the contaminated or potential contaminated area.

x = the hydraulic capacity of the pipe proposed by the municipality/water company which is larger than necessary to serve the contaminated or potential contaminated area.

q = the total construction contract cost of installing the larger pipe proposed by the municipality/water company.

(J) The costs of operation and maintenance of potable drinking water facilities except for the costs of monitoring and maintaining individual water treatment systems during the first year following installation.

(h) **Required Provisions of Construction Contracts**

As a minimum, all construction contract specifications must include provisions for the following:

(1) Bid bond in an amount of 5 percent of bid price (Sec. 49-41 of the Connecticut General Statutes as amended.)

(2) Payment and performance bonds each for 100% of bid price (Sec. 49-41 of the Connecticut General Statutes as amended.)

(3) Maximum retainage on payments to contractors must not exceed 5 percent (Sec. 49-41b of the Connecticut General Statutes as amended.)

(4) Enforcement of payment by general contractor to subcontractor (Sec. 49-41a of the Connecticut General Statutes as amended.)

(5) Substitution of securities for retainage (Sec. 3-112a of the Connecticut General Statutes as amended)

(6) Nondiscrimination clause (Sec. 4-114a of the Connecticut General Statutes as amended.)

(7) A copy of Executive Order No. Three

(8) Prevailing State Wage Rates (Sec. 31-53 of the Connecticut General Statutes as amended.)

(9) A copy of Executive Order No. Seventeen.

(10) Contractor's exempt purchase certificate (Regulation 18 — Sales and Use Tax Division of the State of Conn.)

(11) A statement which indicates a time period for project completion

(12) A dollar amount, per day, for liquidated damages.

(13) Extra work and change order profit amounts

(14) Contractor's Insurance, minimum amounts as follow:

(A) Worker's Compensation (Sec. 31-275 of the Connecticut General Statutes as amended.)

(B) Contractor's Comprehensive and General Liability and Property Damage, $1,000,000.00 — $500,000.00.

(C) Owner's Protective Liability and Property Damage, $1,000,000.00 — $500,000.00.

(D) Contractor's Comprehensive Auto Liability and Property Damage, $1,000,000.00 — $500,000.00.

(i) **Types of Contracts**

Each contract shall be a fixed price (lump sum or unit price or a combination of the two) contract, unless the Commissioner gives prior written approval for the municipality to use some other acceptable type of contract. The cost plus percentage of cost type of contract shall not be used in any event.

(j) **Construction Contract Procurement Requirements**

The municipality shall conduct all procurement transactions in a manner that will provide maximum, open, and free competition. Procurement practices shall not

unduly restrict or eliminate competition. Examples of practices considered to be unduly restrictive include:

(1) Noncompetitive practices between contractors and firms;

(2) Bid collusion;

(3) Organizational conflicts of interest;

(4) Unnecessary experience and bonding requirements;

(5) Local laws, ordinances, regulations, or procedures which give local bidders or proposers preference over other bidders or proposers in evaluating bids or proposals; and

(6) Placing unreasonable requirements on firms in order for them to qualify to do the project work.

(k) **Advertising**

(1) If the value of the contract is less than $25,000.00 then a minimum of 3 bids shall be solicited.

(2) Each construction contract equal to or in excess of $25,000.00, shall be awarded after advertising, and advertising shall be in accordance with the following:

(A) Public notice. The municipality shall cause notice to be given of the solicitation by publication in journals or newspaper of general circulation beyond the municipality's locality, inviting bids on the project work and stating the method by which bidding documents may be obtained or examined.

(B) Time for preparing bid. Adequate time, not less than 10 days, must be allowed between the date when public notice is last published and the date by which bids must be submitted. Bidding documents (including specifications and drawings) shall be available to prospective bidders from the date when such notice is first published.

(C) Bidding documents. The municipality shall prepare a reasonable number of bidding documents (invitations for bids) and shall furnish them upon request on a first-come, first-served basis. The municipality shall maintain a complete set of bidding documents and shall make them available for inspection and copying by any party. The bidding documents shall include:

(i) A complete statement of the work to be performed, including necessary drawings and specifications, and the required completion schedule.

(ii) The terms and conditions of the contract to be awarded.

(iii) A clear explanation of the method of bidding and the method of evaluating the bid prices, and the basis and method for award of the contract.

(iv) Responsibility requirements or criteria which will be employed in evaluating bidders.

(v) The following statement:

> ''Any contract or contracts awarded under this invitation for bids are expected to be funded in part by a grant from the State of Connecticut (Department of Environmental Protection). Neither the State of Connecticut nor any of its departments, agencies or employees is or will be a party to this invitation for bids or any resulting contract.''

(vi) The prevailing State Wage Rates in accordance with Sec. 31-53 of the Connecticut General Statutes, as amended.

(3) Sealed bids. The municipality shall provide for bidding by a sealed bid and for the safeguarding of bids received until public opening.

(4) Addenda to bidding documents. If a municipality desires to amend any part of the bidding documents (including drawings and specifications) during the period when bids are being prepared, the addenda shall be communicated in writing to all firms which have obtained bidding documents at least five (5) working days prior

to the bid opening. Any municipality failing to comply with this deadline and then proceeds to open bids, must be made aware that costs associated with such addenda shall be deemed noneligible.

(5) Bid modifications. A firm which has submitted a bid shall be allowed to modify or withdraw its bid before the time of bid opening.

(6) Public opening of bids. The municipality shall provide for a public opening of bids at the place, date, and time announced in the bidding documents.

(7) Award to the lowest, responsible, qualified bidder.

(A) After bids are opened, the municipality shall evaluate them for conformance with the methods and criteria set forth in the bidding documents.

(B) The municipality may reserve the right to reject all bids. Unless all bids are rejected for good cause, award shall be made to the lowest, responsible, qualified bidder.

(C) If the municipality intends to make the award to a firm which did not submit the lowest bid, it shall prepare a written statement before any award, explaining why each lower bidder was deemed nonresponsible or unqualified. The municipality shall retain such statement in its files and forward a copy to the Commissioner for review.

(*l*) **Municipality Reporting Requirements**

The municipality shall secure, in writing, the Commissioner's authorization to award each construction contract which has an aggregate value over $10,000.00. The request for such authorization shall include:

(1) Name, address, telephone number, and employee identification number of the construction contractor;

(2) Amount of the award;

(3) Estimated starting and completion dates;

(4) Project number, name, and site location of the project, and

(5) A copy of the tabulations of bids or offers and the name of each bidder or offeror.

(m) **Grant Requirements For Water Companies**

Any water company receiving a grant under Section 22a-471 (b) (2) (A) of the Connecticut General Statutes, as amended, shall make application to the Commissioner of Economic Development. Such application shall include an engineering report in accordance with Section 22-471 (b) (2) (D) of the Connecticut General Statutes, as amended.

(1) If upon review of the engineering report and after consultation with the Commissioner of Economic Development, the Commissioner determines that a grant from the Emergency Spill Response Fund is appropriate, the Department of Economic Development shall transfer the application to the Department of Environmental Protection.

(2) The Commissioner may require any other information he deems necessary in support of the application.

(3) The water company shall comply with subsections (g), (h), (i), (j), (k) and (*l*) of these regulations.

(n) **Deviations**

The Commissioner may approve deviations from requirements of these regulations when he determines that such deviations are essential to effect necessary grant actions or when special circumstances make such deviations in the best interest of the State.

(Effective June 23, 1986)

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Oil and Gas Exploration and Production

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Oil and Gas Exploration and Production

Sec. 22a-472-1. Oil and gas exploration and production

(a) **Definitions**

(1) The definitions of the following terms used in this section shall be the same as the definitions in section 22a-423 of the General Statutes: Commissioner, person and pollution.

(2) For the purposes of this section:

''Blowout Preventer'' means equipment installed at the wellhead for the purpose of preventing an uncontrolled flow of gas, oil or other well fluids in the space between the casing and the drill pipe or in an open hole during drilling, completion, or production operations;

''Cement Bond Log'' means a record of the type of cement used to fill the annular space about the casing, the injection method used to inject cement into such annular space, the depth to which such cement has been so injected, and the date of such cement injection;

''Cement Plug'' means a section of a well filled with cement;

''Electrical Well Log'' means the record of electrical characteristics of the geologic horizons intersected by a well;

''Exploration'' means activities conducted for the purpose of obtaining geological, geophysical of geochemical information about oil or gas in the State including seismic activities but not including exploratory well drilling or aerial surveys;

''Fresh-Water Bearing Horizon'' means any geologic strata or horizon yielding or containing water with less than 10,000 parts per million of total dissolved solids;

''Gas'' means all natural gas and all other hydrocarbons that occur in a gaseous phase in the reservoir;

''Geologic Well Log'' means the record of the lithologic characteristics of the horizons traversed by a well;

''Oil'' means crude petroleum oil and other hydrocarbons, regardless of gravity, that are produced in liquid form by ordinary production methods;

''Radioactivity Well Log'' means the record of the radioactive characteristics of the geologic horizons traversed by a well;

''Surface Casing'' means a pipe placed into a well and cemented to the sides of the well from the top to a depth sufficient to seal off all fresh-water bearing horizons;

''Well'' means any excavation that is cored, drilled, jetted, or otherwise created for the purpose of exploring for or producing oil or gas or for the purpose of enhanced recovery or for the disposal of oil-field wastes or for the storage of hydrocarbons, but not including borings less than 100 feet in depth for the purpose of seismic exploration.

(b) **Registration.**

(1) Any person exploring for oil or gas on and after the effective date of this section shall register with the Commissioner of Environmental Protection on a form prescribed by the Commissioner. Exploration or well drilling shall not commence until the Commissioner approves such registration as conforming to the requirements of section 22a-472-1.

(2) Registration information for exploration shall include but not be limited to the following:

(A) the name (if a corporation transacting business in Connecticut, the full exact name as registered with the Secretary of the State), mailing and location addresses and telephone number of the person for whom the exploration is conducted, and,

if such person is a business, the name, mailing and location address and telephone number of the individual designated as the contact for the Commissioner;

(B) a United States Geologic Survey topographic map at a scale of one inch equals 25,000 feet which shows the location of the exploration activity;

(C) a description of the exploration activity, including but not limited to a description of the methods of exploration to be used and the location, depth and number of borings to be drilled;

(D) a registration fee of $50 payable by certified check or money order to the Commissioner of Environmental Protection; and

(E) any other information which the Commissioner deems necessary.

(3) A separate registration shall be submitted for each exploratory well and each oil or gas production well. Registration information for each such well shall include but not be limited to the following:

(A) the name (if a corporation transacting business in Connecticut, the full exact name as registered with the Secretary of the State), mailing and location adresses and telephone numbers of the owner of the land on which the proposed well will be located, the owner of the rights to drill the well and the operator of the well, and, if any such person is a business, the name, mailing and location address and telephone number of the individual designated as the contact for the Commissioner;

(B) a map, drawn to scale, prepared by a land surveyor licensed to practice in Connecticut, which shows the location of the proposed well, the location of each private water supply well within a 1000 foot radius of the proposed well, the location of each public water supply well or public water supply reservoir within a one mile radius of the proposed well, and the names and locations of all watercourses, springs and roads within a one mile radius of the proposed well; the Commissioner shall notify the owner of any public water supply well or public water supply reservoir identified in accordance with this subparagraph of a registration upon receipt of the registration information;

(C) the proposed final depth of the proposed well;

(D) the depth of each private well within a 1000 foot radius of the proposed well and the depth of each public water supply well within a one mile radius of the proposed well;

(E) the estimated depth and diameter of surface casing to be installed in the proposed well, and the material and diameter of which such casing is made;

(F) the type and quantity of fluids to be used or produced during or as a result of drilling, and the proposed method of handling and disposal for each type of fluid. Handling and disposal shall be consistent with all legal requirements, including but not limited to Sections 22a-430-8, 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies, as amended. In addition, any uncontrolled loss of oil, water chemical or gas from an oil or gas well must be immediately reported to the Commissioner or the State Police as required by Section 22a-450 of the Connecticut General Statutes;

(G) the latitude, longitude and surface elevation above mean sea level for the location of the proposed well;

(H) the proposed well diameter and drilling method to be used;

(I) a surety or performance bond payable to the State of Connecticut in the sum of $25,000 for each proposed well, conditioned on the well being drilled, maintained and abandoned in accordance with this section and the exploration and production activities not causing pollution;

(J) a fee of $250 for each proposed exploratory well, and $500 for each proposed oil or gas production well, payable by certified check or money order to the Commissioner of Environmental Protection; and

(K) any other information which the Commissioner deems necessary.

(4) The Commissioner may, at any time, increase or decrease the amount of the bond required by subparagraph (b) (3) (I) of section 22a-472-1 upon consideration of the potential extent and degree of pollution from the exploration or production activity, the potential costs for study of the extent and degree of pollution, prevention and remediation of pollution if pollution occurs or is threatened; and the potential costs of proper abandonment.

(5) If a registrant becomes aware of a change in the information submitted as part of a registration, or that any such information was erroneous, or that any relevant facts were omitted from the registration, he or she shall submit the correct information to the Commissioner in writing within thirty days. Notwithstanding this requirement, information regarding the depth of the well being drilled need not be altered until thirty days after the drilling of such well ceases, at which time the actual depth of the surface casing and geologic, electrical and radioactivity well logs as well as a cement bond log, and any other information as necessary to verify to the Commissioner that the well has been constructed in accordance with the requirements of this Section shall be submitted to the Commissioner and made a part of the registration. Within thirty days after abandoning a well, the registrant shall verify to the Commissioner that the well has been properly abandoned in accordance with the requirements of subsection (f) of section 22a-472-1, and such verification shall be made a part of the registration.

(c) **Registration expiration.**

A registration is not transferable and a registration expires if drilling operations have not commenced within one year of the Commissioner's approval of a registration in accordance with subdivision (b) (1) of Section 22a-472-1.

(d) **Well construction requirements.**

(1) The casing program adopted for each well must be designed to protect against the potential for infiltration of oil or gas bearing horizons into a water bearing horizon, to prevent the migration of oil or gas from one horizon to another and to prevent the infiltration of water from any source into potential oil or gas bearing horizons. All casing shall be new and in good condition.

(2) Unless otherwise approved in writing by the Commissioner, surface casing shall extend from the ground surface to a depth of at least fifty feet below the lowest fresh water bearing horizon. Sufficient cement shall be used to fill the annular space from the base of the surface casing to the surface of the ground. Cement shall be added from the base of the casing upward and shall be circulated back to the surface.

(3) Unless otherwise approved in writing by the Commissioner, all wells shall be equipped with a blowout preventer during drilling or production activities and all blowout prevention equipment shall be maintained in good working order at all times.

(e) **Well drilling activities.**

All activities related to the exploration or production of oil and gas including but not limited to the generation of oil field wastes such as waste oil, wastewater, chemicals, mud and/or cement, or the construction of unlined evaporation sumps, catch basins or mud pits, shall be conducted in such a manner so as not to create a condition which reasonably can be expected to create a source of pollution to the waters of the State.

(f) **Well abandonment requirements.**

(1) Thirty days prior to the abandonment of any well the registrant of that well shall give notice to the Commissioner of the intent to undertake such abandonment.

(2) Each exploratory and production well shall be abandoned in accordance with the following: The bottom of the well shall be filled with mud-laden fluid weighing at least nine pounds per gallon with not less than thirty-six viscosity A.P.I., full funnel method, to twenty-five feet below the bottom of the surface casing, except that each producing formation shall be sealed with a cement plug which extends from either the bottom of the well or twenty-five feet below the base of each producing formation upward to a point at least fifty feet above the top of each producing formation. A cement plug shall extend from at least twenty-five feet below the bottom of the surface casing to at least fifty feet above the bottom of the surface casing. The well shall then be filled with mud-laden fluid weighing at least nine pounds per gallon with not less than thirty-six viscosity A.P.I. from fifty feet above the bottom of the surface casing to at least thirty feet from the top of the well. A cement plug shall extend from thirty feet from the top of the well to the ground surface.

(3) The surface casing shall not be removed from the well at any time.

(4) Each well used for the production of oil or gas which has not been in operation for one year or more shall be properly abandoned in accordance with this subsection, unless otherwise approved in writing by the Commissioner.

(5) Exploratory wells shall be properly abandoned in accordance with this subsection within one hundred eighty days of cessation of drilling, unless otherwise approved in writing by the Commissioner.

(Effective April 30, 1987)

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Clean Water Fund

Sec. 22a-482-1. Introduction and priority management system

(a) **Definitions** as used in Sections 22a-482-1 to 22a-482-4 inclusive,

(1) ''Act'' means the Federal Clean Water Act (33 U.S.C. 1251 et seq., as amended).

(2) ''Ad valorem tax'' means a tax based upon the assessed value of real property.

(3) ''Applicant'' means a municipality as defined in section 22a-475 of the General Statutes.

(4) ''Architectural or engineering services'' means consultation, investigations, reporting and design services offered within the scope of the practice of architecture or professional engineering as defined by the laws of the State of Connecticut.

(5) ''Building'' means the erection, acquisition, alteration, remodeling, improvement or extension of pollution abatement facilities.

(6) ''Cash flow projection'' means a schedule of expenditures to municipal prime contracts throughout the life of the project.

(7) ''Clean Water Fund'' means the fund created under sections 22a-475 to 22a-483 inclusive of the General Statutes.

(8) ''Collector sewer'' means the common lateral sewers, within a publicly owned sewer system, which are primarily installed to receive wastewaters directly from facilities which convey wastewaters from individual systems, or from private property, and which include service ''Y'' connections designed for connection with those facilities including:

(A) crossover sewers connecting more than one property on one side of a major street, road, or highway to a lateral sewer on the other side when they are more cost-effective than parallel sewers; and

(B) pumping units and pressurized lines serving individual structures or groups of structures when such units are more cost-effective and are owned and maintained by the municipality.

This definition excludes other facilities which convey wastewater from individual structures or from private property to the public lateral sewer or its equivalent and also excludes facilities associated with alternatives to conventional pollution abatement facilities in small communities.

(9) ''Combined sewer'' means a sewer that is designed as a sanitary sewer and a storm sewer.

(10) ''Compatible industrial wastewater'' means wastewater that is produced by an industrial user, has a pollutant strength and other characteristics similar to those of domestic wastewater, and can be efficiently and effectively transported and treated with domestic wastewater.

(11) ''Complete waste treatment system'' means a system that consists of all the pollution abatement facilities necessary to meet the requirements of Title III of the Act, involving the transport of wastewater from individual homes or buildings to a plant or facility where treatment of the wastewater is accomplished; the treatment of the wastewater to remove pollutants; and the ultimate disposal, including recycling or reuse, of the treated wastewater and residues which result from the treatment process.

(12) ''Construction'' means the erection, building, acquisition, alteration, remodeling, improvement or extension of pollution abatement facilities; or, the inspection and supervision of any of the foregoing items.

(13) ''Cost Analysis'' means the review and evaluation of each element of subagreement cost to determine reasonableness, allocability and allowability.

(14) ''Design'' means studies, surveys, plans, working drawings, specifications, procedures and field testing of innovative and alternative wastewater treatment processes and techniques (excluding operation and maintenance) requisite for the construction of pollution abatement facilities.

(15) ''Excessive infiltration/inflow'' means the quantity of infiltration/inflow which can be economically eliminated from a sewer system as determined in a cost-effectiveness analysis that compares the costs for correcting the infiltration/inflow conditions to the total costs for transportation and treatment of the infiltration/inflow.

(16) ''Grantee'' means a municipality as defined in section 22a-475 of the General Statutes.

(17) ''Individual systems'' means privately owned alternative pollution abatement facilities (including dual waterless/gray water systems) serving one or more principal residences or small commercial establishments. Normally these are onsite systems with localized treatment and disposal of wastewater, but may include systems serving a cluster of principal residences or small commercial establishments.

(18) ''Infiltration'' means water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

(19) ''Inflow'' means water other than wastewater that enters a sewer system (including sewer service connections) from sources such as, but not limited to: roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

(20) ''Initiation of operation'' means the date specified by the municipality on which use of the project begins for the purpose that it was planned, designed and built.

(21) ''Interceptor sewer'' means a sewer which is designed for one or more of the following purposes:

(A) to intercept wastewater from collector sewers and convey such wastes directly to a treatment facility or another interceptor;

(B) to replace an existing pollution abatement facility and transport the waste to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant;

(C) to transport wastewater from one or more municipal collector sewers to another municipality or to a regional plant for treatment; or

(D) to intercept an existing discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to a pollution abatement facility.

(22) ''Municipality'' is as defined in section 22a-475 of the General Statutes.

(23) ''Nonexcessive infiltration'' means the quantity of wastewater flow which cannot be economically and effectively eliminated from a sewer system as determined in a cost-effectiveness analysis.

(24) ''Nonexcessive inflow'' means the rainfall induced peak inflow rate which does not result in chronic operational problems related to hydraulic overloading of the pollution abatement facility during storm events. These problems may include surcharging, backups, bypasses, and overflows.

(25) ''Operation and maintenance'' means activities required to assure the dependable and economical functioning of pollution abatement facilities.

(A) Maintenance: preservation of functional integrity and efficiency of equipment and structures. This includes preventive maintenance, corrective maintenance and replacement of equipment as needed during the useful life of the facility.

(B) Operation: control of the unit processes and equipment which make up the pollution abatement facility. This includes financial and personnel management, records, laboratory control, process control, safety and emergency operation planning.

(26) ''Pollution abatement facility'' is as defined in section 22a-475 of the General Statutes and is synonymous with the terms project, treatment works, treatment system, and treatment facility.

(27) ''Pollution abatement facility phase or segment'' means any portion of a complete pollution abatement facility described in an approved engineering report which can be identified as a contract or discrete sub-item or subcontract. Completion of the building of a pollution abatement facility phase or segment may, but need not in and of itself, result in an operable pollution abatement facility.

(28) ''Planning'' means all necessary engineering reports and studies to determine the feasibility of pollution abatement facilities including pertinent engineering, architectural, legal, fiscal and economic investigations prior to design.

(29) ''Project performance standards'' means the performance and operational requirements applicable to a project including the enforceable requirements of the Act and the specifications which the project is planned and designed to meet.

(30) ''Price analysis'' means the process of evaluating a prospective price without regard to the contractor's separate cost elements and proposed profit. Price analysis determines the reasonableness of the proposed subagreement price based on adequate price competition, previous experience with similar work, established catalog or market price, law, or regulation.

(31) ''Principal residence'' means the habitation of a family or household for at least 51 percent of the year. Second homes, vacation or recreation residences are not included in this definition.

(32) ''Profit'' means the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price.

(33) ''Project schedule'' means a timetable specifying the dates of key project events including public notices of proposed procurement actions, subagreement awards, issuance of a notice to proceed with the building and key milestones in the building, initiation of operation and completion of the project.

(34) ''Replacement'' means expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary during the useful life of the pollution abatement facility to maintain the capacity and performance for which such works were designed and constructed. The term ''operation and maintenance'' includes replacement.

(35) ''Sanitary sewer'' means a conduit intended to carry liquid and water carried wastes from residences, commercial buildings, industrial plants and institutions together with minor quantities of ground, storm and surface waters that are not admitted intentionally.

(36) ''Services'' means a contractor's labor, time or efforts which do not involve the delivery of a specific end item, other than documents which may result from the contractor's labor, time or efforts (e.g., reports, design drawings, specifications). This term does not include employment agreements or collective bargaining agreements.

(37) ''Small commercial establishments'' means private commercial establishments such as restaurants, hotels, stores, filling stations, or recreational facilities; or private, non-profit entities such as: churches, schools, hospitals, or charitable organizations having dry weather wastewater flows of less than 25,000 gallons per day.

(38) ''Small community'' means any municipality with a population of 5,000 or less or highly dispersed sections of large municipalities, as determined by the Commissioner.

(39) ''Storm sewer'' means a sewer designed to carry only storm waters, surface runoff, street wash waters and drainage.

(40) ''Subagreement'' means a written agreement between a grant recipient and another party (other than another public agency) and any lower tier agreement for services, supplies, equipment, or construction necessary to complete the project. Subagreements include contracts and subcontracts for personal and professional services, agreements with consultants and purchase orders.

(41) ''Useful life'' means the period during which a pollution abatement facility will be operated.

(42) ''User charge'' means a charge levied on users of a pollution abatement facility, or that portion of the ad valorem taxes paid by a user, for the user's proportionate share of the cost of operation and maintenance (including replacement) of such facility.

(43) ''Value engineering'' (VE) means a specialized cost control technique which uses a systematic and creative approach to identify and to focus on unnecessarily high costs in a project in order to arrive at cost savings without sacrificing the reliability or efficiency of the project.

(b) **Development and Format of Project Priority List.**

(1) The Commissioner shall make funding assistance available for projects on a state priority list as established under this section for such periods as are authorized by the Legislature under Chapter 446k of the General Statutes.

(2) The Commissioner shall prepare an ordered priority listing of projects for which state funding assistance shall be made available for the period effective July 1st to the following June 30th corresponding to the state fiscal year.

(3) The priority list shall contain two portions: (A) a fundable portion consisting of those highest priority projects ready for construction and anticipated to be funded within the current state fiscal year; and (B) a future portion consisting of those projects that may be funded from future authorized allotments.

(c) **State Priority System and Project Priority List.**

(1) Priority Rating Criteria. All projects eligible for funding assistance shall be evaluated and assigned a priority rating in accordance with the criteria set forth below and will appear on the project priority list. The Commissioner may determine that large-scale, multi-phase projects be segregated and rated separately. Each project shall be evaluated and given points as applicable for each of the following rating criteria, the sum of which shall determine its priority number. These criteria are consistent with the rating system used to establish federal funding priorities and are shown in the following table:

PRIORITY RATING POINT SYSTEM

I. Benefit of project upon adversely impacted potable water supplies. (10 points maximum)

A. Impaired water supply affecting less than 25 people–2 points.

B. Impaired water supply affecting 26 to 100 people–4 points.

C. Impaired water supply affecting 101 to 1,000 people–6 points.

D. Impaired water supply affecting 1001 to 5,000 people–8 points.

E. Impaired water supply affecting more than 5,000 people–10 points.

II. Benefit of project toward attainment of designated water quality standards and goals. (28 points maximum)

A. Project is necessary for attainment of water quality standards where the impacted water resource is:

1. Smaller than main stem of a sub-regional drainage basin or groundwater goals will be attained–5 points.

2. Main stem of sub-regional drainage basin–10 points.

3. Main stem of regional drainage basin–15 points.

4. Main stem of major drainage basin–20 points.

B. Project will impact coastal areas (considered the equivalent of a regional drainage basin)–15 points.

For the purposes of the Priority Rating Point System, the drainage basin designations are defined on the map entitled ''Natural Drainage Basins in Connecticut: 1981'' prepared by the Natural Resources Center of the Department of Environmental Protection in cooperation with the United States Geological Survey.

C. Project will enable impacted waters to meet minimum dissolved oxygen standards–8 points.

III. Project will enhance specific water resource values. (24 points maximum)

A. Fishery resources–(6 points maximum).

1. Project will improve recreational fisheries–3 points.

2. Project will improve anadromous fisheries–6 points.

3. Project will open new streams for fish stocking programs–6 points.

B. Shellfish resources–(6 points maximum).

1. Project will lower coliform bacteria levels in the waters of shellfish beds–3 points.

2. Project will open new areas for shellfishing–6 points.

C. Swimming–(6 points maximum).

1. Project will enhance existing swimming opportunities–3 points.

2. Project will allow for new swimming opportunities–6 points.

D. Eutrophication–(6 points maximum).

1. Project will reduce eutrophication of a lake or impoundment by diverting septic system discharges out of a drainage basin–3 points.

2. Project will reduce eutrophication of a lake or impoundment by providing nutrient removal in a municipal treatment plant or by relocating an existing treatment plant discharge–6 points.

IV. Population equivalent (including commercial and industrial waste) initially served by the project. (12 points maximum)

A. Less than 5000–2 points.

B. 5,000 but less than 10,000–4 points.

C. 10,000 but less than 20,000–6 points.

D. 20,000 but less than 40,000–8 points.

E. 40,000 but less than 75,000–10 points.

F. 75,000 or greater–12 points.

V. Health and Sanitation Impacts. (6 points)

Project will eliminate ponding of sewage from failing septic systems, backup of sewage into basements, or overflow of sewage in streets (combined sewer overflow correction projects are not eligible for points).

VI. Miscellaneous. (20 points maximum)

A. Project involves the upgrading of an existing primary facility in order to comply with secondary treatment standards–5 points.

B. Project that will result in Commissioner rescinding an Order concerning a sewer connection moratorium–5 points.

C. Project will eliminate nuisance odors associated with treatment processes or pump stations but exclusive of large-scale expansion or upgrading of pollution abatement facilities–5 points.

D. Remedial action will improve treatment plant operations where treatment standards are already being achieved–5 points.

VII. Connecticut Housing Partnership Program–Development Designation Community has received development designation–3 points.

Note: In cases where the priority rating or score is the same for two or more projects, the order is determined by the highest score assigned cumulatively in criteria II (total), III (total), and IV. If a tie still remains, preference will be given to those projects ready to proceed at the earliest date within the limit of funds available.

(2) Project Ranking Mechanism. The relative position or rank of a project on the priority list for funding will be determined by its priority number and its readiness to proceed to construction during the funding year under consideration. The Commissioner may choose to assign a higher rank for projects which fall into one of the following categories:

(A) Category I–Consists of projects for which a construction application was submitted for review during the previous funding period and which were on the fundable portion of that year's priority list. These applications have undergone preliminary review, are essentially complete and represent the good faith efforts of municipalities to comply with grant program requirements. Only those projects from the fundable portion of the previous year's priority list can be placed in this category;

(B) Category II–Consists of phased projects where previous phases were funded by the Clean Water Fund: Phased funding takes into account local disruption created by construction activities and the ability of the Clean Water Fund to finance the entire project in one fiscal year. The state has a strong commitment to a phased project once it is initiated.

(C) Category III–Consists of projects which remedy documented pollution of potable water supplies. In order to qualify for high ranking for funding within this special category, projects must meet the following basic criteria: (i) the scope of the pollution problem is significant; (ii) the affected water supply is not potable, i.e. does not meet minimum drinking water standards and requires treatment beyond chlorination; and (iii) pollution abatement facilities are the cost-effective solution to the problem. This category does not apply to potential emergency use of class B waters for potable water supply as defined in the Connecticut Water Quality Standards adopted pursuant to section 22a-426 of the General Statutes.

(3) Order of Funding Priority. The Commissioner shall distribute funds subject to the requirements for public hearing set forth in this section. It is the goal to establish a balance between planning, design and construction. Therefore, all needs within the highest funding designation need not be fulfilled before proceeding to the next highest funding designation. The following categories establish the general order in which assistance is made:

(A) funds to finance temporary loans for planning and design pursuant to section 22a-478 (e) of the General Statutes necessary for planning and design for sewage facility projects;

(B) a reserve of funds to finance unanticipated cost increases for projects previously funded;

(C) a reserve of funds sufficient to finance at least one small community project;

(D) additional set asides which the Commissioner may establish if he or she determines that serious health or water quality problems caused by wastewater facilities are in the public interest to correct, but will not receive sufficient-priority to correct in a time frame he or she considers reasonable; and

(E) funds available for construction.

(4) Annual Public Hearing. The amount of funds applied to each category described in subdivision (3) of this subsection shall be determined annually by the Commissioner based upon available funds and shall be designated in a draft priority list. The draft priority list will indicate which specific projects are proposed to receive funding within each funding designation for the upcoming fiscal year and shall be made available to appropriate local officials at least thirty (30) days prior to a specified date for public hearing. The Commissioner will consider all written and oral testimony presented at the hearing and may elect to modify the draft priority list on the basis of such testimony. The Commissioner shall also indicate his or her reasons for accepting or rejecting any suggested revisions as part of the hearing record. Following notice of any changes to the priority list which may result from the hearing, the priority list shall be deemed final except for minor revisions allowable under subdivision (5) of this section.

(5) Revisions to the Priority List.

(A) The priority system shall include a project bypass procedure. The Commissioner may bypass a project on the fundable portion of the priority list if he or she determines that the bypassed project will not be ready to proceed within the first six months of the funding year. The Commissioner shall advise, in writing, each municipality he or she intends to bypass and the reasons therefore. Projects that are bypassed will retain their relative priority rating for consideration in future years. Projects bypassed will be replaced by the next highest ranking project ready to proceed. Projects will be removed from the priority list the following year after they receive funding.

(B) Revisions to the priority list may be made at any time during the funding period. If the Commissioner determines the change to be significant, a public hearing with appropriate notice will be held and all affected by such a change will be notified directly.

(Effective March 5, 1992)

Sec. 22a-482-2. Requirements for funding project agreements

(a) **Types of Projects.** The Commissioner is authorized to award assistance for the following types of projects:

(1) Planning: the preparation of engineering reports;

(2) Design: the preparation of contract plans and specifications; and

(3) Construction: the building of pollution abatement facilities and sewers.

(b) **Level of State Assistance.** The amount of state funding assistance shall be based on the Commissioner's determination of eligibility and the provisions of sections 22a-475 to 22a-483, inclusive, of the General Statutes.

(c) **Applications for Funding Assistance.** A municipality applying for funding assistance shall file properly executed forms and applications prescribed by the Commissioner. In addition, the following supporting documentation shall be submitted as appropriate:

(1) An Application for Engineering Report Funding Assistance which shall include:

(A) a Plan of Study including:

(i) the proposed planning area;

(ii) an identification of the entity or entities that will be conducting the planning;

(iii) the nature and scope of the proposed planning project and public participation program, including a schedule for the completion of specific tasks; and

(iv) an itemized description of the estimated engineering report costs;

(B) proposed subagreements, or an explanation of the intended method of awarding subagreements, for performance of any substantial portion of the project;

(C) a resolution adopted by the municipality's Water Pollution Control Authority authorizing a specific person to file the application and execute the agreement. The resolution shall be certified and sealed by the Town/City Clerk; and

(D) a cash flow projection.

(2) An Application for Design Funding Assistance which shall include:

(A) an engineering report meeting all the requirements set forth in section 22a-482-3 (a) of the Regulations of Connecticut State Agencies.

(B) proposed subagreements, or an explanation of the intended method of awarding subagreements, for performance of any substantial portion of the project;

(C) a resolution adopted by the municipality's Water Pollution Control Authority authorizing a specific person to file the application and execute the agreement. The resolution must be certified and sealed by the Town or City Clerk;

(D) a value engineering (VE) commitment in compliance with section 22a-482-3 (d) of the Regulations of Connecticut State Agencies for all design funding assistance applications for projects with a projected total building cost of $10 million or more, including the cost for interceptor and collector sewers. For those projects requiring VE, the municipality may propose, subject to the Commissioner's approval, to exclude interceptor and collector sewers from the scope of the VE analysis;

(E) proposed or executed (as determined appropriate by the Commissioner) intermunicipal agreements necessary for the construction and operation of the proposed pollution abatement facility for any facility serving two or more municipalities;

(F) a schedule for initiation and completion of the project work;

(G) evidence that local authority to construct the facilities has been obtained; and

(H) a cash flow projection.

(3) An Application for Construction Assistance which shall include:

(A) all requirements for design funding assistance as specified in subdivision (c)(2) of this section;

(B) a final legal opinion stating that the acquisition of all sites, easements or rights-of-way necessary to assure undisturbed construction and operation and maintenance of the proposed project have been acquired. The cost of any real property eligible for funding assistance must reflect fair market value as determined by standard recognized appraisal methods;

(C) two copies of contract plans and specifications for the review and approval of the Commissioner;

(D) a schedule for submission of a proper operation and maintenance program including a preliminary plan of operation;

(E) an approved user charge system developed in accordance with the requirements set forth in section 22a-482-3 (e) of the Regulations of Connecticut State Agencies;

(F) a cash flow projection; and

(G) amounts and terms of any other financial assistance.

(d) **Terms of Funding Assistance.**

(1) No financial assistance shall be made for a pollution abatement facility that would provide capacity for new connections or other developments to be located in environmentally sensitive land such as wetlands, floodplains, prime agricultural lands, or regulated coastal zones. Appropriate and effective funding conditions (e.g. restricting sewer hook-ups) should be used where necessary to protect these resources from new development.

(2) The prime purpose in the award of construction assistance is to solve existing pollution problems and not intended to assist in new development.

(3) For engineering reports and design, no financial assistance will be allowed for any engineering work performed before award without the prior written approval of the Commissioner.

(4) Except as otherwise provided in this subsection, no assistance for construction may be awarded for any construction which is initiated prior to the date of award. Preliminary construction work, such as advance acquisition of major equipment items requiring long lead times, acquisition of an option for the purchase of eligible land, or advance construction of minor portions of a pollution abatement facility, including associated engineering costs, in emergencies or instances where delay could result in significant cost increases, may be approved by the Commissioner after the completion of an environmental review, but only if the municipality submits a written and adequately substantiated request.

(5) The approval of a plan of study, an engineering report, plans and specifications, advance acquisition of equipment or advance construction will not constitute a commitment or approval of assistance for a subsequent phase of the project. In instances where such approval is obtained, the applicant proceeds at its own risk, since payment for such costs cannot be made unless assistance for the project is awarded.

(6) The municipality shall notify the Commissioner that it has complied or will comply with the applicable procurement provisions of subsections (f), (g) and (h) of 22a-482-4 of the Regulations of Connecticut State Agencies before the award of any assistance.

(7) Within ninety (90) days after receipt of a completed application (excluding suspension periods for submission of supplemental information), the Commissioner will take one of the following actions: (A) approve for award; (B) defer due to lack of funding; or (C) disapprove the application. The applicant shall be promptly notified, in writing, of any deferral or disapproval. A deferral or disapproval of an application shall not preclude its reconsideration or a reapplication.

(8) The Commissioner will transmit the funding agreement to the applicant for execution. The agreement must be executed by the applicant and returned within three (3) calender weeks after receipt. The agreement shall set forth the approved project scope, budget (cash flow analysis), total project costs, and the approved commencement and completion dates for the project or major phases thereof.

(9) The project funding agreement shall set forth the amount of funding assistance. The amount may not exceed the amount of funds available.

(10) The amount and term of funding assistance shall be determined at the time of award. The time period is subject to extension for excusable delay, at the discretion of the Commissioner.

(11) The amount of financial assistance shall not exceed 100% of the cost eligible for grant and loan. Calculation of a grant or loan available shall first include a deduction of financial assistance available from other sources.

(12) The municipality may finance short term debt through the marketplace or from the Clean Water Fund.

(A) Accrued interest on funds borrowed from the marketplace shall be paid at the time of borrowing.

(B) Accrued interest on amounts borrowed from the Clean Water Fund may be either paid at the time of such borrowing or become part of the principal to be repaid over the term of the project and shall be determined by the Commissioner at the time of issuance of the project funding obligation. Short term interest shall be charged at the rate of 2% per year compounded annually for all outstanding loan balances. Interest on short term obligations shall be computed on the basis of a year of 360 days and the number of days elapsed. Interest shall be charged from the date a check is issued from the fund to the municipality.

(13) Grant proceeds shall be disbursed only upon a determination by the Commissioner that satisfactory documentation of eligible grant costs have been received.

(14) The Commissioner shall establish a procedure for disbursement of grant and loan proceeds to the municipalities.

(15) The municipality shall use the proceeds of the project loan and the project grant solely for the purpose of funding the project. The municipality shall promptly disburse to all contractors the proceeds of such project loan and project grant on the same day that it receives proceeds from the state.

(16) The municipality shall agree and covenant in the project funding agreement that it shall, at all times, do and perform all acts and things reasonably requested by the state to insure interest paid on any tax exempt obligations issued by the state to fund the Clean Water Fund shall, for the purposes of federal income taxation, be excludable from the gross income of the recipients thereof under the Internal Revenue Code of 1986, as amended.

(17) The municipality shall have all project costs, loans, and grants audited by an auditor approved by the Commissioner.

(18) The municipality shall repay to the Clean Water Fund all outstanding loan balances, including principal and interest accrued, within twenty years from the scheduled completion date of the project.

(19) The municipality shall establish a dedicated source of repayment of the loan satisfactory to the Commissioner.

(20) Each project loan obligation shall be paid in substantially equal monthly installments of principal and interest or in monthly installments of principal plus interest which shall be sustantially equal and which shall be arranged such that no principal installment payable in any month shall be less than the amount of any installment payable in any subsequent month.

(21) Payments on long term loans shall begin one year from the scheduled completion date of the project. Should excusable delay cause the actual completion to go beyond scheduled completion the Commissioner and the municipality shall enter into a project funding agreement to cover project cost incurred after the specified date.

(22) The Commissioner shall make loans to the municipalities at an interest rate not to exceed two percent compounded annually.

(23) Interest on the loan shall be computed on the basis of 360 days and the actual number of days elapsed.

(24) The Commissioner may provide short term loans to municipalities for planning and design, as applicable, of an eligible water quality project. The municipalities may not be required to begin repaying its short term loan for planning or design,

as applicable, until six months after the date of completion of such planning or design provided the municipality must commence design or construction, as applicable, within six months.

(25) The municipality shall comply with the following federal laws and Executive Orders:

(A) Archeological and Historic Preservation Act of 1974, P.L. 93-291;

(B) Coastal Barrier Resources Act, 16 U.S.C. 3501 et seq.;

(C) Coastal Zone Management Act of 1972, P.L. 92-583;

(D) Endangered Species Act, 16 U.S.C. 1531, et seq.;

(E) Executive Order 11593, Protection and Enhancement of the Cultural Environment;

(F) Executive Order 11990, Protection of Wetlands;

(G) Farmland Protection Policy Act, 7 U.S.C. 4201 et. seq.;

(H) Fish and Wildlife Coordination Act, P.L. 85-624;

(I) National Historic Preservation Act of 1966, P.L. 89-665;

(J) Safe Drinking Water Act, section 1424 (e), P.L. 92-523;

(K) Wild and Scenic Rivers Act, P.L. 90-542;

(L) Demonstration Cities and Metropolitan Development Act of 1966, P.L. 89-754;

(M) Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, including Executive Order 11738;

(N) Brooks Murkowski Act, P.L. 100-202;

(O) Age Discrimination Act, P.L. 94-135;

(P) Civil Rights Act of 1964, P.L. 88-352;

(Q) Section 13 of P.L. 92-500, prohibition against sex discrimination;

(R) Executive Order 11246, Equal Employment Opportunity;

(S) Executive Orders 11625 and 12138, Women's and Minority Business Enterprise;

(T) Rehabilitation Act of 1973, P.L. 93-112, including Executive Orders 11914 and 11250;

(U) Uniform Relocation and Real Property Acquisition Policies Act of 1970, P.L. 91-646;

(V) Executive Order 12549, Debarment and Suspension;

(W) Executive Order 11988, Flood Plain Management; and

(X) Clearn Air Act, 42 U.S.C. 7506 (c).

(Effective March 5, 1992)

Sec. 22a-482-3. Technical program elements

(a) **Engineering Report Requirements.**

(1) General. Engineering reports consist of those necessary plans and studies which directly relate to the development of pollution abatement strategies and the construction of pollution abatement facilities necessary to comply with an Order to Abate Pollution as defined in section 22a-423 of the General Statutes. The engineering report will demonstrate the need for the proposed pollution abatement facility through an evaluation of all feasible alternatives and shall demonstrate that the selected alternative is cost-effective, i.e. is the most economical means of meeting effluent and water quality goals while recognizing environmental considerations.

(2) Content of Engineering Reports. The content of the engineering report shall be determined by the Commissioner based on a pre-report conference with the municipality and its engineering consultant regarding the precise plan of study

(engineering report outline) and resulting scope of services to be performed. Engineering reports shall address at a minimum each of the following as determined appropriate by the Commissioner:

(A) A detailed evaluation of the existing and potential wastewater treatment and disposal problems in the study area;

(B) a cost-effective analysis of alternatives available to correct the pollution problems identified. The final selection of alternative(s) to correct the problems noted shall be based on the results of the cost-effective analysis, including the present worth or equivalent annual value of all capital costs, and operation, maintenance and replacement costs. The interest rate used for this analysis shall be the rate established by the Federal Water Resources Council for use in federally funded projects. The population forecasting in the analysis shall be consistent with current projections of the Connecticut Office of Policy and Management. A cost-effective analysis shall include:

(i) the relationship of the size and capacity of the recommended facilities to the needs to be served, including any reserve capacity;

(ii) an evaluation of alternative flow and waste reduction measures, including nonstructural methods;

(iii) an evaluation of improved effluent quality attainable by upgrading the operation, maintenance and efficiency of existing facilities as an alternative or supplement to construction of new pollution abatement facilities;

(iv) an evaluation of the capability of each alternative to meet applicable effluent limitations and water quality standards;

(v) various treatment techniques including: conventional biological or physical-chemical treatment and discharge systems; land application techniques and other innovative and alternative techniques which may result in recycling of water and pollutants; onsite and nonconventional systems, both community and individual;

(vi) an evaluation of the alternative methods for the ultimate disposal of treated wastewater and sludge materials resulting from the treatment process and a justification for the method(s) chosen; and

(vii) an adequate assessment of the expected environmental impact of alternatives (including sites) under the requirements of sections 22a-1a to 22a-1h, inclusive, of the General Statutes;

(C) if applicable, a demonstration of the non-existence or possible existence of excessive infiltration/inflow in the affected sewerage system;

(D) an identification of proposed effluent discharge limits, if appropriate, and a description of how the proposed project will result in compliance with any pollution abatement order issued by the Commissioner;

(E) a summary of public participation in the development of the engineering report;

(F) a brief statement demonstrating that the local authorities who will be implementing the plan have the necessary legal, financial, institutional, and managerial resources available to insure the construction, operation and maintenance of the proposed pollution abatement facilities;

(G) a brief description of potential opportunities for recreation, open space, and access to bodies of water afforded by the recommended project; and

(H) for the selected alternative, a concise description of at least the following;

(i) estimated capital construction, and operation and maintenance costs;

(ii) estimated cost of future expansion and long term needs for reconstruction of pollution abatement facilities following their useful life;

(iii) cost impacts on pollution abatement facility users; and

(iv) a statement concerning the availability and estimated cost of any proposed treatment sites.

(3) Public Participation.

(A) The scope and level of detail of the public participation program shall be determined during the development of the plan of study. The program shall be comprised of public forums such as workshops, meetings and hearing(s) as necessary to promote public awareness and input into the planning process.

(B) At a minimum, prior to adoption of the engineering report, the municipality must hold a public hearing to describe the proposed program and action(s) and to assure that the public's concerns are fully considered.

(C) The time and place of the public hearing shall be conspicuously and adequately announced at least 10 days in advance, or for such longer period as may be required by local ordinance or charter. Copies of the engineering report must be made available for inspection by the public at least 10 days prior to the hearing.

(D) A request to waive the public hearing on an engineering report may be submitted in writing to the Commissioner when the municipality determines a public hearing is not necessary and would not serve the public interest.

(4) Environmental Review. Prior to the award of a project funding agreement for design or construction, the requirements of the Connecticut Environmental Policy Act (sections 22a-1 to 22a-1h, inclusive, of the General Statutes) shall have been met. The municipality must prepare an adequate environmental assessment of expected environmental impacts consistent with the requirements of sections 22a-1a to 22a-1h, inclusive, of the General Statutes as part of facility planning. Projects receiving financial assistance shall comply with the following:

(A) for any project not required in the department's Environmental Classification Document to undergo an environmental impact evaluation or finding of no significant impact, the Commissioner shall publish a notice in a newspaper of community-wide circulation indicating the determination that a Finding of No Significant Impact is not necessary and that supporting documentation for this determination is available for inspection.

(B) when the Commissioner determines that significant changes in the project or environmental conditions have occurred, an amendment to the Environmental Impact Evaluation or the Finding of No Significant Impact or the determination that a Finding of No Significant Impact is not necessary will be issued in accordance with sections 22a-1a to 22a-1h, inclusive, of the General Statutes.

(C) for Environmental Impact Evaluations, Findings of No Significant Impact, or determinations that a Finding of No Significant Impact is not necessary which are five or more years old for projects seeking a construction project funding agreement, the Commissioner shall re-evaluate the project, environmental conditions and public comments and prior to financial award shall either:

(i) issue a public notice in a newspaper of community-wide circulation reaffirming the decision to proceed with the project without revising the Finding of No Significant Impact or Environmental Impact Evaluation or reaffirming that a Finding of No Significant Impact is not necessary; or

(ii) update information and prepare or amend the Environmenta1 Impact Evaluation or Finding of No Significant Impact in accordance with sections 22a-1a to 22a-1h, inclusive, of the General Statutes;

(iii) withdraw the Finding of No Significant Impact and prepare an Environmental Impact Evaluation in accordance with the sections 22a-1a to 22a-1h, inclusive, of the General Statutes.

(D) in the development of the Finding of No Significant Impact, the Commissioner shall include a description and analysis of the reasonable alternatives to the proposed action, including no action.

(b) **Small Community Systems.** Projects proposed to be funded from the Reserve for Small Communities shall be for improvements to existing wastewater treatment systems or new collector sewers, interceptor sewers and treatment works serving small communities. Routine interceptor sewer extensions within municipalities that do not meet the definition of a small community are not eligible for funding from this reserve. Categories of projects eligible for assistance under this reserve are: (1) projects involving improvements to or construction of collector sewers, interceptor sewers and treatment works for which the entire proposed service area within the municipality meets the definitions of a small community; and (2) projects for interceptor sewers connecting a service area meeting the definition of a small community to a wastewater treatment facility in another municipality. In order to be eligible for funding under this reserve, the applicant must demonstrate to the satisfaction of the Commissioner that the only alternative to the proposed project would be the construction of new treatment works which would involve a discharge of treated wastewater which would result in violation of, or require a revision to, the State's Water Quality Standards and Criteria as adopted pursuant to section 22a-426 of the General Statutes.

(c) **Privately Owned Individual Systems.**

(1) A municipality may apply for funding assistance to construct privately owned pollution abatement facilities serving one or more principal residences or small commercial establishments.

(2) In addition to the engineering report requirements set forth in subsection (a) of this section the municipality shall:

(A) demonstrate that the total present worth cost and environmental impact of building the individual systems will be less than the present worth cost of a larger municipally owned pollution abatement facility;

(B) demonstrate to the satisfaction of the Commissioner that the individual systems proposed are part of a technically feasible and implementable program which will successfully address all existing and potential wastewater treatment needs within the planning area;

(C) certify that each principal residence or small commercial establishment was constructed before July 1, 1983, and inhabited or in use on or before that date;

(D) apply on behalf of a number of individual units to be served in the planning area;

(E) certify that, where public ownership of such works is not feasible, the municipality will have unlimited right of access to the site and to the system for the purpose of necessary inspection, maintenance, and repair;

(F) certify that such treatment works will be properly operated and maintained and will comply with all other requirements of sections 22a-482-1 to 22a-482-4 of the Regulations of Connecticut State Agencies, applicable state statutes and regulations; and

(G) certify that a user charge system, established in compliance with section (e) of this subsection, will be developed and implemented to ensure the availability of financial resources sufficient to ensure the proper operation, maintenance, and eventual repair or replacement of funded facilities and those individual systems which are within the service area identified in subparagraph (B) of this subsection but which are not required and replaced with the assistance funds.

(d) **Value Engineering (VE)**

(1) Value Engineering Proposal. All design funding assistance applications for projects having a projected total building cost of $10 million or more, including the cost for interceptor and collector sewers, will contain a VE proposal. The VE proposal must contain sufficient information for the Commissioner to determine the adequacy of the VE effort and the justification of the proposed VE fee. Essential information shall include the scope of VE analysis, VE team and VE coordinator (names and background), level of VE effort, VE cost estimate, and VE schedule in relation to the project schedule (including completion of VE analysis and submittal of VE summary reports). The VE coordinator and a majority of the VE team members shall be employed by a firm (or firms) other than the design engineering consultant.

(2) Value Engineering Analysis. When the VE analysis is completed, a preliminary report summarizing the VE findings and a final report describing implementation of the VE recommendations must be submitted to the Commissioner.

(3) Valve Engineering Implementation. For those projects on which a VE analysis has been performed, VE recommendations shall be implemented to the maximum extent feasible, as determined by the municipality, subject to the approval of the Commissioner. Rejection of any recommendations shall be on the basis of cost-effectiveness, reliability, and other factors that may be critical to the treatment processes, the environmental impact of the project and the extent of project delays.

(e) User Charge System. The user charge system must be designed to produce adequate revenues required for the operation, maintenance, and replacement of the pollution abatement facilities. It shall provide that each user which discharges wastewaters to the system, causing an increase in the cost of operating and maintaining the pollution abatement facilities, shall pay for such increased cost. The user charge system shall be based on either actual use or ad valorem taxes as follows:

(1) User Charge System Based on Actual Use. A municipality's user charge system based on actual use (or estimated use) of wastewater treatment services shall provide that each user (or user class) pays its proportionate share of operation and maintenance (including replacement) costs of the pollution abatement facilities within the municipality's service area, based on the user's proportionate contribution to the total wastewater loading from all users (or user classes).

(2) User Charge System Based on Ad Valorem Taxes. A municipality's user charge system which is based on ad valorem taxes shall provide that:

(A) on the effective date of sections 22a-482-1 to 22a-482-4, inclusive, of the Regulations of Connecticut State Agencies, the municipality had in existence a system of dedicated ad valorem taxes which collected revenues to pay the cost of operation and maintenance of the pollution abatement facilities within the municipality's service area and the municipality has continued to use that system;

(B) each member of the industrial user and commercial user class which discharges more than 25,000 gallons per day of sanitary waste pays its share of the costs of operation and maintenance (including replacement) of the pollution abatement facilities based upon charges for actual use; and

(C) the Commissioner determines that the municipality has historically demonstrated that the ad valorem system has resulted in proper operation, maintenance and management of the pollution abatement facilities, including the sewer system.

(3) Notification. Each user charge system must provide that each user be notified, at least annually, in conjunction with a regular bill, of the rate and that portion of the user charges or ad valorem taxes which are attributable to wastewater treatment services.

(4) Financial Management System. Each user charge system must include an adequate financial management system that will accurately account for revenues generated by the system and expenditures for operation and maintenance (including replacement) of the treatment system.

(5) Charges for Operation and Maintenance for Extraneous Flows. The user charge system shall provide that the costs of operation and maintenance for all flow not directly attributable to users (i.e., infiltration/inflow) be distributed among all users based upon either of the following:

(A) in the same manner that it distributes the costs for their actual use; or

(B) under a system which uses one or any combination of the following factors on a reasonable basis:

(i) flow volume of the users;

(ii) land area of the users;

(iii) number of hookups or discharges of the users; or

(iv) property valuation of the users, if the municipality has an approved user charge system based on ad valorem taxes.

(6) Adoption of System. One or more municipal legislative enactments or other appropriate authority must incorporate the user charge system. If the project is a treatment system accepting wastewaters from other municipalities, the subscribers receiving waste treatment services from the municipality shall adopt user charge systems in accordance with this section. These user charge systems shall also be incorporated in appropriate municipal legislative enactments or other appropriate authority of all municipalities contributing wastes to the pollution abatement facilities. Grant payments shall not exceed 90% of the total construction grant award until the municipality has adopted the approved user charge system.

(7) Implementation of System. The municipality shall implement its user charge system before the pollution abatement facility is placed in operation.

(f) **Sewer Use Ordinance.**

(1) Each municipality applying for funding assistance shall demonstrate to the satisfaction of the Commissioner that a sewer use ordinance or other legally binding requirement has been or will be enacted and will be enforced in each jurisdiction served by the pollution abatement facility before the completion of construction. The ordinance shall prohibit any new connections from inflow sources into the sanitary sewer portions of the pollution abatement facility; shall insure that new sewers and connections to the pollution abatement facility are properly designed and constructed; and shall require that all wastewaters introduced into the pollution abatement facility will not contain toxics or other pollutants in amounts or concentrations that endanger public safety or the physical integrity of the pollution abatement facility, cause violation of the conditions of any permit issued by the Commissioner, or preclude the selection of the most cost-effective alternative for wastewater treatment and sludge disposal.

(2) Grant payments shall not exceed 50% of the total construction grant award until the municipality has submitted a copy of its sewer use ordinance to the Commissioner for review.

(3) Grant payments shall not exceed 90% of the total construction grant award until the municipality's sewer use ordinance has been approved by the Commissioner and enacted by the municipality.

(4) The municipality shall adopt and implement its sewer use ordinance before the pollution abatement facility is placed in operation.

(g) **Infiltration/Inflow.**

(1) General. The municipality shall demonstrate to the Commissioner's satisfaction that each sewer system discharging into the proposed pollution abatement facility is not, or will not, be subject to excessive infiltration/inflow. For combined sewers, inflow is not considered excessive in any event.

(2) Inflow. If the rainfall induced peak inflow rate results or will result in chronic operational problems during storm events, the municipality shall perform a study of the sewer system to determine the quantity of excessive inflow and to propose a rehabilitation program to eliminate the excessive inflow. All cases in which pollution abatement facilities are planned for the specific storage and/or treatment of inflow shall be subject to a cost-effective analysis.

(3) Infiltration.

(A) If the flow rate at the existing pollution abatement facility is 150 gallons per capita per day or less during periods of high groundwater, the municipality shall build the project including sufficient capacity to transport and treat any existing infiltration. However, if the municipality believes any specific portion of its sewer system is subject to excessive infiltration, the municipality may confirm its belief in a cost-effective analysis and propose a sewer rehabilitation program to eliminate that specific excessive infiltration.

(B) If the flow rate at the existing pollution abatement facility is significantly more than 150 gallons per capita per day during periods of high groundwater, the municipality shall perform a study of the sewer system to determine the quantity of excessive infiltration and to propose a sewer rehabilitation program to eliminate the excessive infiltration.

(C) If the flow rate at the existing pollution abatement facility is not significantly more than 150 gallons per capita per day, the municipality may request the Commissioner to determine that the project may proceed without further study.

(D) The Commissioner may authorize the municipality to perform minor sewer system rehabilitation concurrently with the sewer system evaluation survey if there is no adverse environmental impact. Rehabilitation which would be a part of the municipality's normal operation and maintenance responsibilities shall not be fundable.

(h) **Reserve Capacity.** The Commissioner will limit grant assistance for reserve capacity in pollution abatement facilities as follows:

(1) no grant shall be made to provide reserve capacity for a project for secondary or more stringent treatment or new interceptors and appurtenances. Grants for such projects shall be based on capacity necessary to serve existing needs as determined on the date of award of the construction grant and shall be consistent with the definition for eligible capacity established for the Federal Construction Grants Program in 40 CFR 35.2123; and

(2) the Commissioner shall require the construction of reasonable reserve capacity.

(Effective March 5, 1992)

Sec. 22a-482-4. Administrative program elements

(a) **Allowable Grant Costs.** Those costs associated with the planning, design and construction of pollution abatement facilities eligible for state grant assistance are as follows:

(1) costs of salaries, benefits, and expendable materials the municipality incurs for the project, except as provided for in subdivision (b) (8) of this section;

(2) costs under construction contracts;

(3) professional and consultant services;

(4) engineering report costs directly related to the pollution abatement facility;

(5) sewer system evaluation;

(6) project feasibility and related engineering reports;

(7) costs of complying with the Connecticut Environmental Policy Act, section 22a-1a to 22a-1h of the General Statutes, including costs of public notices and hearings;

(8) preparation of construction drawings, specifications, estimates and construction contract documents;

(9) reasonable landscaping;

(10) materials acquired, consumed, or expended specifically for the project;

(11) shop equipment installed at the pollution abatement facility necessary to the operation of the facility;

(12) a reasonable inventory of laboratory chemicals and supplies necessary to initiate plant operations;

(13) development and preparation of a preliminary and final plan of operation and an operation and maintenance manual;

(14) start-up services for new pollution abatement facilities;

(15) project identification signs;

(16) costs of complying with the procurement requirements of this section;

(17) the costs of technical services for assessing the merits of or negotiating the settlement of a claim by or against the municipality provided;

(A) a formal grant amendment is executed specifically covering the costs before they are incurred;

(B) the costs are not incurred to prepare documentation that should be prepared by the contractor to support a claim against the municipality; and

(C) the Commissioner determines that there is a significant state interest in the issues involved in the claim;

(18) change orders and the costs of meritorious contractor claims for increased costs, provided the costs are not caused by the municipality's mismanagement or vicarious liability for the improper action of others. Settlements, arbitration awards, and court judgments which resolve contractor claims shall be reviewed by the Commissioner and shall be allowable only to the extent they are not caused by municipality mismanagement, are reasonable, and do not attempt to pass on to the State of Connecticut the costs of events that were the responsibility of the municipality, contractor or others;

(19) costs necessary to mitigate only direct, adverse, or physical impacts resulting from the building of the pollution abatement facility;

(20) the cost of groundwater monitoring facilities necessary to determine the possibility of groundwater deterioration, depletion or modification resulting from the project;

(21) for individual and small community systems, allowable costs which include:

(A) the cost of major rehabilitation, upgrading, enlarging and installing small and onsite systems, but in the case of privately owned systems, only for principal residences;

(B) conveyance pipes from the property line to an offsite treatment unit which serves a cluster of buildings;

(C) treatment and treatment residue disposal portions of toilets with composting tanks, oil flush mechanisms, or similar in-house devices;

(D) treatment or pumping units from the incoming flange, when located on private property, and conveyance pipes, if any, to the collector sewer; and

(E) the cost of restoring individual system building sites to their original condition;

(22) necessary safety equipment applicable to federal, state and local requirements;

(23) a portion of the costs of collection system maintenance equipment, as determined by the Commissioner;

(24) the cost of mobile equipment necessary for the operation of the overall pollution abatement facility, transmission of wastewater or sludge, or for the maintenance of equipment. These items include:

(A) portable stand-by generators;

(B) large portable emergency pumps to provide ''pump-around'' capability in the event of a pump station failure or pipeline breaks; and

(C) sludge or septic tank trucks, trailers, and other vehicles having as their sole purpose the transportation of liquid or dewatered wastes from the collector point (including individual or on-site systems) to the pollution abatement facility or disposal site;

(25) replacement parts identified and approved in advance by the Commissioner as necessary to assure uninterrupted operation of the pollution abatement facility, provided they are critical parts or major system components which are:

(A) not immediately available or whose procurement involves an extended ''lead-time'';

(B) identified as critical by the equipment supplier(s); or

(C) critical but not included in the inventory provided by the equipment supplier(s);

(26) allowable costs for infiltration/inflow which include:

(A) the cost of sewer system and pollution abatement facility capacity adequate to transport and treat nonexcessive infiltration/inflow; and

(B) the costs of sewer system rehabilitation necessary to eliminate excessive infiltration/inflow as determined in a sewer system evaluation survey under section 22a-482-3 (g);

(27) the costs of royalties for the use of rights in a patented process or product with the prior approval of the Commissioner;

(28) the cost of legal and engineering services incurred by the municipality in deciding procurement protests and defending their decisions in protest appeals with the prior approval of the Commissioner;

(29) the cost of the services of the prime engineer required under subdivision (p)(10) of this section during the first year following initiation of operation of the pollution abatement facility; and

(30) the costs of municipal employees attending training workshops or seminars that are necessary to provide instruction in administrative, fiscal or contracting procedures required to complete the construction of the pollution abatement facility, if approved in advance by the Commissioner.

(b) **Unallowable Grant Project Costs.** Costs which are not necessary for the construction of a pollution abatement facility are unallowable. Such costs include, but are not limited to:

(1) basin or areawide planning not directly related to the project;

(2) bonus payments not legally required for completion of construction before a contractual completion date;

(3) personal injury compensation or damage arising out of the project whether determined by arbitration, negotiation, or otherwise;

(4) unallowable costs for small and onsite systems which include:

(A) modification to physical structure of homes or commercial establishments;

(B) conveyance pipes from the house to the treatment unit located on user's property; and

(C) wastewater generating fixtures such as commodes, sinks, tubs and drains;

(5) fines and penalties due to violations of, or failure to comply with, federal, state, or local laws and regulations;

(6) costs outside the scope of the approved project;

(7) approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project, and the interest on them;

(8) ordinary operating expenses of local government, such as salaries and expenses of a mayor, city council members, or city attorney, except as provided in subdivision (h) (13) of this section;

(9) the costs of acquisition (including associated level, administrative, and engineering) of sewer rights-of-way, pollution abatement facility sites (including small systems sites), sanitary landfill sites and sludge disposal sites, except as provided in subsection (c) of this section;

(10) costs for which payment has been or will be received under any federal assistance program;

(11) the cost of vehicles used primarily for transportation, such as pickup trucks;

(12) costs of equipment or materials acquired in violation of the procurement provisions of this section;

(13) the cost of furnishings including draperies, furniture and office equipment;

(14) the cost of ordinary site and building maintenance equipment, such as lawn mowers, snowblowers and vacuum cleaners;

(15) costs of monitoring equipment used by industry for sampling and analysis of industrial discharges to a municipal pollution abatement facility;

(16) construction of privately-owned pollution abatement facilities, including pretreatment facilities, except for individual systems;

(17) preparation of applications, including a plan of study and permits required by federal, state or local laws and regulations;

(18) administrative, engineering and legal activities associated with the establishment of special departments, agencies, commissions, regions, districts or other units of government;

(19) the cost of a pollution abatement facility or any part thereof that would provide capacity for new habitation or other establishments to be located on environmentally sensitive land such as wetlands, floodplains, or prime agricultural lands;

(20) the costs of legal services of defending or negotiating the settlement of a claim by or against the municipality; and

(21) all incremental costs of delay due to the award of any significant subagreements for construction more than 12 months after the construction grant award.

(c) **Allowable Grant Project Costs, If Approved.**

(1) The cost (including associated legal, administrative and engineering costs) of land acquired in fee simple or by lease or easement that will be an integral part of the treatment process or that will be used for the ultimate disposal of residues resulting from such treatment provided the Commissioner approves it in the grant agreement. These costs include:

(A) the cost of a reasonable amount of land, considering irregularities in application patterns, and the need for buffer areas, berms, and dikes;

(B) the cost of land acquired for a soil absorption system for a group of two or more homes:

(C) the cost of land acquired for composting or temporary storage of compost residues which result from wastewater treatment;

(D) the cost of land acquired for storage of treated wastewater in land treatment systems before land application; and

(E) the cost paid by the municipality for eligible land in excess of just compensation based on the appraised value, the municipality's record of negotiation or a condemnation proceeding, as determined by the Commissioner, shall be unallowable.

(2) The cost associated with the preparation of the pollution abatement facility site before, during and, to the extent agreed on in the grant agreement, after building. These costs include:

(A) the cost of demolition of existing structures on the pollution abatement facilities site (including rights-of-way), if building cannot be undertaken without such demolition;

(B) the cost of removal, relocation or replacement of utilities, for which the municipality is legally obligated to pay under section 22a-470 of the General Statutes; and

(C) the cost of restoring streets and rights-of-way to their original condition. The need for such restoration shall result directly from the construction and is generally limited to repaving the width of trench.

(3) The cost of acquiring all or part of existing publicly or privately owned pollution abatement facilities, provided all of the following criteria are met:

(A) the acquisition, in and of itself, considered apart from any upgrade, expansion or rehabilitation, provides new pollution control benefits;

(B) the acquired pollution abatement facility was not built with previous federal or state financial assistance; and

(C) the primary purpose of the acquisition is not the reduction, elimination, or redistribution of public or private debt.

(d) **Allowable Loan Project Costs:**

(1) all costs allowable for grant participation under subsections (a) and (c) of this section;

(2) all costs necessary to complete the project including land, legal, rights-of-way, interest and claim settlements;

(3) all costs associated with incremental capacity for growth; and

(4) those costs a reasonable business person would incur when operating his or her own business necessary to construct the project.

(e) **Unallowable Loan Project Costs:**

(1) costs associated with improvements to municipal or private property not related to pollution control;

(2) costs associated with the liability of other contractors and subcontractors; and

(3) costs associated with waste, fraud or abuse.

(f) **Required Provisions for Architectural/Engineering Contracts.**

(1) Subagreement Enforcement.

(A) Commissioner's Authority. At a municipality's request the Commissioner may provide technical and legal assistance in the administration and enforcement of any subagreement related to a pollution abatement facility for which state financial assistance was made and intervene in any civil action involving the enforcement of such subagreements, including subagreement disputes which are the subject of either arbitration or court action. Any assistance to be provided is at the discretion of the Commissioner and in a manner determined by him or her to best serve the public

interest. Factors which the Commissioner may consider in determining whether to provide assistance include:

(i) available department resources;

(ii) planned or ongoing enforcement action;

(iii) the municipality's demonstration of good faith in attempting to resolve the contract matters at issue;

(iv) the municipality's adequate documentation of the need for assistance; and

(v) the state's interest in the contract matters at issue.

(B) Municipality Request. The municipality's request for technical or legal assistance should be submitted in writing and be accompanied by documentation adequate to inform the Commissioner of the nature and necessity of the requested assistance.

(C) Privity of Subagreement. The Commissioner's technical or legal involvement in any subagreement dispute will not make the Commissioner a party to any subagreement entered into by the municipality.

(D) Municipality Responsibility. The provision of technical or legal assistance under this section in no way releases the municipality from its obligations under sections 22a-482-1 to 22a-482-4, inclusive, or affects the Commissioner's right to take remedial action against a municipality that fails to carry out those obligations.

(2) Subagreement Provisions.

(A) Each subagreement shall include provisions defining a sound and complete agreement, including the:

(i) nature, scope, and extent of work to be performed;

(ii) time frame for performance;

(iii) total cost of the subagreement; and

(iv) payment provisions.

(B) All subagreements awarded in excess of $10,000 shall contain provisions requiring compliance with state and federal equal employment opportunity laws and regulations.

(3) Model Subagreement Clauses. Municipalities shall include subparagraphs (A) to (L), inclusive, of this subdivision or their equivalent in all subagreements for architectural or engineering services. (Municipalities may substitute other terms for ''municipality'' and ''engineer'' in their subagreements.)

(A) Supersession. The municipality and the engineer agree that this and other appropriate clauses in this section, or their equivalent, apply to the state grant eligible work to be performed under this subagreement and that these clauses supersede any conflicting provisions of this subagreement.

(B) Privity of Subagreement. This subagreement is expected to be funded in part with funds from the State of Connecticut, Department of Environmental Protection (DEP). Neither the state nor any of its departments, agencies, or employees is or will be a party to this subagreement or any lower tier subagreement. This subagreement is subject to sections 22a-482-1 to 22a-482-4 of the Regulations of Connecticut State Agencies in effect on the date of the grant award for the project.

(C) Changes to Subagreement.

(i) The municipality may at any time, by written order, make changes within the general scope of this subagreement in the services or work to be performed. If such changes cause an increase or decrease in the engineer's cost or time required to perform any services under this agreement, whether or not changed by any order, an equitable adjustment shall be made and this subagreement shall be modified in writing. The engineer must assert any claim for adjustment under this clause in writing within 30 days from the date of receipt by the engineer of the notification

of change, unless the municipality grants additional time before the date of final payment.

(ii) No services for which additional compensation will be charged by the engineer shall be furnished without the written authorization of the municipality.

(iii) In the event that there is a modification of the Commissioner's requirements relating to the services to be performed under this agreement after the date of execution of this agreement, the increased or decreased cost of performance of the services provided for in the agreement shall be reflected in an appropriate modification of this agreement.

(D) Termination of Subagreement.

(i) This subagreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this subagreement through no fault of the terminating party. However, no termination may be effected unless the other party is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(ii) This subagreement may be terminated in whole or in part in writing by the municipality for its convenience, provided that the engineer is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(iii) If termination for default is effected by the municipality, an equitable adjustment in the price provided for in this subagreement shall be made, but no amount shall be allowed for anticipated profit on unperformed services or other work and any payment due to the engineer at the time of termination may be adjusted to cover any additional costs to the municipality because of the engineer's default. If termination for default is effected by the engineer; or if termination for convenience is effected by the municipality; the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to the engineer for services rendered and expenses incurred prior to the termination, in addition to termination and settlement costs reasonably incurred by the engineer relating to commitments which had become firm prior to the termination.

(iv) Upon receipt of a termination action pursuant to subparagraphs (D) (i) or (D) (ii) of this subdivision, the engineer shall promptly discontinue all services affected (unless the notice directs otherwise) and deliver or otherwise make available to the municipality all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the engineer in performing this subagreement, whether completed or in process.

(v) Upon termination under subparagraphs (D) (i) or (D) (ii) of this subdivision, the municipality may take over the work and may award another party a subagreement to complete the work under this subagreement.

(vi) If, after termination for failure of the engineer to fulfill contractual obligations, it is determined that the engineer had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the municipality. In such event, adjustment of the price provided for in this subagreement shall be made as provided in subparagraph (D) (iii) of this subdivision.

(E) Remedies. Except as may be otherwise provided in this subagreement, all claims, counter-claims, disputes, and other matters in question between the munici-

pality and the engineer arising out of or relating to this subagreement, or the breach thereof, will be decided by arbitration, if the parties mutually agree, or in a court of competent jurisdiction within the district in which the municipality is located.

(F) Price Reduction for Defective Cost or Pricing Data (This clause is applicable if the amount of the agreement exceeds $100,000). The engineer warrants that cost and pricing data submitted for evaluation with respect to negotiation of prices for negotiated subagreements and lower tier subagreements is based on current, accurate, and complete data supported by books and records. If the municipality or Commissioner determines that any price, including profit, negotiated in connection with this subagreement, any lower tier subagreement, or any amendment thereunder was increased by any significant sums because the data provided was incomplete, inaccurate, or not current at the time of submission, then such price, cost or profit shall be reduced accordingly, and the subagreement shall be modified in writing to reflect such reduction.

(NOTE– Since the subagreement is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontractors, the engineer may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the engineer. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by lower tier subcontractors.)

(G) Audit; Access to Records.

(i) The engineer shall maintain books, records, documents, and other evidence directly pertinent to performance on grant work under this agreement in accordance with generally accepted accounting principles and practices consistently applied. The engineer shall also maintain the financial information and data used by the engineer in the preparation or support of the cost submission required for any negotiated subagreement or change order in effect on the date of execution of this agreement and a copy of the cost summary shall be submitted to the municipality. The municipality and Commissioner or any of his or her duly authorized representatives shall have access to all such books, records, documents, and other evidence for inspection, audit, and copying during normal business hours. The engineer will provide proper facilities for such access and inspection.

(ii) The engineer agrees to include subparagraphs (G) (i) to (G) (v) of this subdivision, inclusive, in all his contracts and all lower tier subcontracts directly related to project performance that are in excess of $10,000, and to make subparagraphs (G) (i) to (G) (v) of this subdivision, inclusive, applicable to all change orders directly related to project performance.

(iii) Audits conducted under this subparagraph shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit department and shall meet the requirements of section 7-396a of the General Statutes.

(iv) The engineer agrees to the disclosure of all information and reports resulting from access to records under subparagraphs (G) (i) and (G) (ii) of this subdivision to any of the parties referred to in subparagraph (G) (i) of this subdivision, provided that the engineer is afforded the opportunity for an audit exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report and that the final audit report will include written comments of reasonable length, if any, of the engineer.

(v) The engineer shall maintain and make available records under subparagraphs (G) (i) and (G) (ii) of this subdivision during performance on grant funded work

under this agreement and until three (3) years from the date of final grant payment for the project. In addition, those records which relate to any dispute appeal arising under a grant agreement, to litigation, to the settlement of claims arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three (3) years after the date of resolution of such appeal, litigation, claim, or exception.

(H) Covenant Against Contingent Fees. The engineer warrants that no person or selling agency has been employed or retained to solicit or secure this subagreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the engineer for the purpose of securing business. For breach or violation of this warranty the municipality shall have the right to annul this agreement without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

(I) Gratuities.

(i) If the municipality finds after a notice and hearing that the engineer, or any of the engineer's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the municipality or the state, in an attempt to secure a subagreement or favorable treatment in awarding, amending, or making any determinations related to the performance of this agreement, the municipality may, by written notice to the engineer, terminate this agreement. The municipality may also pursue other rights and remedies that the law or this subagreement provides. However, the existence of the facts on which the municipality bases such findings shall be in issue and may be reviewed in proceedings under subparagraph (E) of this subdivision.

(ii) In the event this subagreement is terminated as provided in subparagraph (I)(i) of this subdivision the municipality may pursue the same remedies against the engineer as it could pursue in the event of a breach of the subagreement by the engineer and, as a penalty, in addition to any other damages to which it may be entitled by law, may pursue exemplary damages in an amount (as determined by the municipality) which shall be not less than three, nor more than ten times the costs the engineer incurs in providing any such gratuities to any such officer or employee.

(J) Responsibility of the Engineer.

(i) The engineer shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports, and other services furnished by the engineer under this subagreement. The engineer shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in his designs, drawings, specifications, reports, and other services.

(ii) The engineer shall perform the professional services necessary to accomplish the work required to be performed under this subagreement, in accordance with this subagreement and applicable requirements of the Commissioner in effect on the date of execution of the assistance agreement for this project.

(iii) Approval by the municipality or the Commissioner of drawings, designs, specifications, reports, and incidental work or materials furnished hereunder shall not, in any way, relieve the engineer of responsibility for the technical adequacy of his work. Neither the municipality's nor Commissioner's review, approval, acceptance, or payment for any of the services shall be construed as a waiver of any rights

under this subagreement or of any cause of action arising out of the performance of this subagreement.

(iv) The engineer shall be and shall remain liable, in accordance with applicable law, for all damages to the municipality or the state caused by the engineer's negligent performance of any of the services furnished under this subagreement, except for errors, omissions, or other deficiencies to the extent attributable to the municipality, municipality-furnished data, or any third party. The engineer shall not be responsible for any time delays in the project caused by circumstances beyond the engineer's control.

(v) The engineer's obligations under this subparagraph are in addition to the engineer's other expressed or implied warranties under this subagreement or state law and in no way diminish any other rights that the municipality may have against the engineer for faulty materials, equipment, or work.

(K) Payment.

(i) Payment shall be made in accordance with the payment schedule incorporated in this subagreement, as soon as practicable, upon submission of statements requesting payment by the engineer to the municipality. If no such payment schedule is incorporated in this subagreement, the payment provisions of subparagraph (K) (ii) of this subdivision shall apply.

(ii) The engineer may request monthly progress payments and the municipality shall make them, as soon as practicable, upon submission of statements requesting payment by the engineer to the municipality. When such progress payments are made, the municipality may withhold up to ten (10) percent of the vouchered amount until satisfactory completion by the engineer of work and services within a step called for under this subagreement. When the municipality determines that the work under this subagreement, or any specified task hereunder, is substantially complete and that the amount of retained percentages is in excess of the amount considered by the municipality to be adequate for its protection, it shall release to the engineer such excess amount.

(iii) No payment request made under subparagraph (K) (i) or (K) (ii) of this subdivision shall exceed the estimated amount and value of the work and services performed by the engineer under this subagreement. The engineer shall prepare the estimates of work performed and shall supplement them with such supporting data as the municipality may require.

(iv) Upon satisfactory completion of the work performed under this subagreement, as a condition precedent to final payment under this subagreement or to settlement upon termination of the subagreement, the engineer shall execute and deliver to the municipality a release of all claims against the municipality arising under or by virtue of this subagreement, other than such claims, if any, as may be specifically exempted by the engineer from the operation of the release in stated amounts to be set forth therein.

(L) Copyrights and Rights in Data.

(i) The engineer agrees that any plans, drawings, designs, specifications, computer programs (which are substantially financed by state funds), technical reports, operating manuals, and other work submitted with an engineering report, with a design or for construction with financing assistance, or which are specified to be delivered under this subagreement, or which are developed or produced and paid for under this subagreement (referred to in subparagraph (L) (ii) of this subdivision as ''subject data''), and including all raw data obtained or generated by the engineer during the course of his work under this subagreement, are subject to certain rights

in the United States. These rights include the right to use, duplicate, and disclose such subject data, in whole or in part, in any manner for any purpose whatsoever, and to have others do so. If the material is copyrightable, the engineer may copyright it, subject to the rights of the state described herein, but the municipality and the state reserve a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, and use such materials, in whole or in part, and to authorize others to do so. The engineer shall include appropriate provisions to achieve the purpose of this condition in all subcontracts expected to produce copyrightable subject data; and

(ii) all such subject data furnished by the engineer pursuant to this subagreement are instruments of his services in respect to the project. It is understood that the engineer does not represent such subject data to be suitable for reuse on any other project or for any other purpose. If the municipality reuses the subject data without the engineer's specific written verification or adaptation, such reuse will be at the risk of the municipality without liability to the engineer. Any such verification or adaptation will entitle the engineer to further compensation at rates agreed upon by the municipality and the engineer.

(g) **Required Provisions for Construction Contracts.** Municipalities must include, when appropriate, subdivisions (1) to (14), inclusive, of this subsection, or their equivalent, in each subagreement and may substitute other terms for ''grantee'' and ''contractor'' in their subagreements.

(1) Supersession. The municipality and the contractor agree that the following general provisions, or their equivalent, apply to eligible work to be performed under this contract and that these provisions supersede any conflicting provisions of this contract.

(2) Privity of Contract. This contract is expected to be funded in part by the State of Connecticut. Neither the state, nor any of its departments, agencies, or employees is or will be a party to this contract or any lower tier subcontract. This contract is subject to sections 22a-482-1 to 22a-482-4, inclusive, of the Regulations of Connecticut State Agencies.

(3) Changes for Contracts for Construction.

(A) The municipality may, at any time, without notice to any surety, by written order designated or indicated to be a change order, make any change in the work within the general scope of the subagreement, including but not limited to changes:

(i) in the specifications (including drawings and designs);

(ii) in the time, method, or manner of performance of the work;

(iii) in the municipality-furnished facilities, equipment, materials, services, or site; or

(iv) directing acceleration in the performance of the work.

(B) A change order shall also be any other written or oral order (including direction, instruction, interpretation or determination) from the municipality which causes any change, provided the contractor gives the municipality written notice stating the date, circumstances, and source of the order and that the contractor regards the order as a change order.

(C) Except as provided in subdivision (3) of this subsection, no order, statement, or conduct of the municipality shall be treated as a change under subdivision (3) of this subsection or entitle the contractor to an equitable adjustment.

(D) If any change under subdivision (3) of this subsection causes an increase or decrease in the contractor's cost or the time required to perform any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the subagreement modified in writing. However, for claims

based on defective specifications, no claim for any change under subparagraph (B) of this subdivision shall be allowed for any costs incurred more than 20 days before the contractor gives written notice as required in subparagraph (B) of this subdivision. In the case of defective specifications for which the municipality is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the contractor in attempting to comply with those defective specifications.

(E) If the contractor intends to assert a claim for an equitable adjustment under this clause, he shall, within thirty (30) days after receipt of a written change order under subparagraph (A) of this subdivision, or the furnishing of a written notice under subparagraph (B) of this subdivision, submit to the grantee a written statement setting forth the general nature and monetary extent of such claim. The municipality may extend the 30-day period. The statement of claim may be included in the notice under subparagraph (B) of this subdivision.

(F) No claim by the contractor for an equitable adjustment shall be allowed if made after final payment under this contract.

(4) Changes for Contracts for Supplies.

(A) The municipality may at any time, by a written order and without notice to the sureties, make changes within the general scope of this subagreement in any one or more of the following:

(i) drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the municipality;

(ii) method of shipment or packing; and

(iii) place of delivery.

(B) If any change causes an increase or decrease in the cost or the time required to perform any part of the work under this subagreement, whether or not changed by any such order, an equitable adjustment shall be made in the subagreement price or delivery schedule, or both, and the subagreement shall be modified in writing. Any claim by the contractor or adjustment under this clause shall be asserted within thirty (30) days from the date of receipt by the contractor of the notification of change. lf the municipality decides that the facts justify such action, the municipality may receive and act upon any such claim asserted at any time before final payment under this subagreement. Where the cost of property is made obsolete or excessive as a result of a change is included in the contractor's claim for adjustment, the grantee shall have the right to prescribe the manner of disposition of such property. Nothing in this subdivision shall excuse the contractor from proceeding with the subagreement as changed.

(5) Differing Site Conditions.

(A) The contractor shall promptly, and before such conditions are disturbed, notify the municipality in writing of:

(i) subsurface or latent physical conditions at the site differing materially from those indicated in this subagreement; or

(ii) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this subagreement. The municipality shall promptly investigate the conditions and, if it finds that conditions are materially different and will cause an increase or decrease in the contractor's cost or the time required to perform any part of the work under this subagreement, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the subagreement modified in writing.

(B) No claim of the contractor under this subdivision shall be allowed unless the contractor has given notice required in subparagraph (A) of this subdivision. However, the municipality may extend the prescribed time.

(C) No claim by the contractor for an equitable adjustment shall be allowed if asserted after final payment under this subagreement.

(6) Suspension of Work.

(A) The municipality may order the contractor, in writing, to suspend, delay, or interrupt all or any part of the work for such period of time as the municipality may determine to be appropriate for the convenience of the municipality.

(B) If the performance of all or any part of the work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the municipality in administration of the contract, (or if no time is specified, within a reasonable time), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing. However, no adjustment shall be made under this subdivision for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the contractor, or for which an equitable adjustment is provided for, or excluded, under any other provision of the contract.

(C) No claim under this subdivision shall be allowed for any costs incurred more than twenty (20) days before the contractor notified the municipality in writing of the act or failure to act involved (this requirement does not apply to a claim resulting from a suspension order), and unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the contract.

(7) Termination.

(A) This contract may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this subagreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(B) This contract may be terminated in whole or in part in writing by the municipality for its convenience, provided that the contractor is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(C) If termination for default is effected by the municipality, an equitable adjustment in the price provided for in this contract shall be made but no amount shall be allowed for anticipated profit on unperformed services or other work, and any payment due to the contractor at the time of termination may be adjusted to cover any additional costs to the municipality because of the contractor's default. If termination for default is effected by the contractor, or if termination for convenience is effected by the municipality, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to the contractor for services rendered and expenses incurred prior to the termination in addition to termination settlement costs reasonably incurred by the contractor relating to commitments which had become firm prior to the termination.

(D) Upon receipt of a termination action pursuant to subparagraphs (A) or (B) of this subdivision, the contractor shall promptly discontinue all services affected (unless the notice directs otherwise), and deliver or otherwise make available to the municipality all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the contractor in performing this contract whether completed or in process.

(E) Upon termination under subparagraphs (A) or (B) of this subdivision the municipality may take over the work and may award another party a contract to complete the work under this contract.

(F) If, after termination for failure of the contractor to fulfill contractual obligations, it is determined that the contractor had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the municipality. In such event, adjustment of the price provided for in this contract shall be made as provided in subparagraph (C) of this subdivision.

(8) Remedies. Except as may be otherwise provided in this contract, all claims, counter-claims, disputes, and other matters in question between the municipality and the contractor arising out of or relating to this contract or the breach thereof will be decided by arbitration, if the parties mutually agree, or in a court of competent jurisdiction within the district in which the municipality is located.

(9) Price Reduction for Defective Cost or Pricing Data.

NOTE– This subdivision is applicable to any contract negotiated between the municipality and its contractor in excess of $500,000; negotiated change orders in excess of $500,000 or 10 percent of the contract, whichever is less, affecting the price of a formally advertised, competitively awarded, fixed price contract; or any lower tier subcontract or purchase order in excess of $500,000 or 10 percent of the assistance agreement, whichever is less, under a contract other than a formally advertised, competitively awarded, fixed price subagreement. This subdivision is not applicable for contracts to the extent that they are awarded on the basis of effective price competition.

The contractor and subcontractor, where appropriate, warrant that cost and pricing data submitted for evaluation with respect to negotiation of prices for negotiated contracts, lower tier subcontracts and change orders is based on current, accurate, and complete data supported by their books and records. If the municipality or the Commissioner determines that any price (including profit) negotiated in connection with this contract, any lower tier subcontract, or any amendment thereunder was increased by any significant sums because the data provided was incomplete, inaccurate, or not current at the time of submission, then such price, cost, or profit shall be reduced accordingly, and the contract shall be modified in writing to reflect such reduction. Failure to agree on a reduction shall be subject to subdivision (8) of this subsection.

NOTE– Since the contract is subject to reduction under this subdivision by reason of defective cost or pricing data submitted in connection with lower tier subcontracts, the contractor may wish to include a clause in each lower tier subcontract requiring the lower tier subcontractor to appropriately indemnify the contractor. It is also expected that any lower tier subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by lower tier subcontractors.

(10) Audit; Access to Records.

(A) The contractor shall maintain books, records, documents, and other evidence directly pertinent to performance on grant work under this contract in accordance

with generally accepted accounting principles and practices consistently applied. The contractor shall also maintain the financial information and data used by the contractor in the preparation or support of the cost submission required under section 22a-482-4 (i) (6) for any negotiated contract or change order and a copy of the cost summary submitted to the municipality. The municipality and the Commissioner or any of his or her authorized representatives shall have access to all such books, records, documents, and other evidence for the purpose of inspection, audit and copying during normal business hours. The contractor will provide proper facilities for such access and inspection.

(B) If this is a formally advertised, competitively awarded, fixed price contract, the contractor agrees to make subparagraphs (A) to (F), inclusive, of this subdivision applicable to all negotiated change orders and contract amendments affecting the contract price. In the case of all other types of prime contracts, the contractor agrees to include subparagraphs (A) to (F), inclusive, of this subdivision in all his subcontracts in excess of $10,000 and to subparagraphs (A) through (F), inclusive, of this subdivision applicable to all change orders directly related to project performance.

(C) Audits conducted under this subdivision shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit departments and shall meet the requirements of section 7-396a of the General Statutes.

(D) The contractor agrees to disclose all information and reports resulting from access to records under subparagraphs (A) and (B) of this subdivision to any of the parties referred to in subparagraph (A) of this subdivision.

(E) Records under subparagraphs (A) and (B) of this subdivision shall be maintained and made available during performance on assisted work under this contract and until three years from the date of final state payment for the project. In addition, those records which relate to any dispute appeal arising under a grant assistance agreement, to litigation, to the settlement of claims arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim, or exception.

(F) This right of access provision (with respect to financial records) applies to:

(i) negotiated prime subagreements:

(ii) negotiated change orders or contract amendments in excess of $10,000 affecting the price of any formally advertised, competitively awarded, fixed price contract; and

(iii) subcontracts or purchase orders under any contract other than a formally advertised, competitively awarded, fixed price contract. However, this right of access does not apply to a prime contract, lower tier subcontract, or purchase order awarded after effective price competition, except with respect to records pertaining directly to contract performance, (excluding any financial records of the contractor), if there is any indication that fraud, gross abuse, or corrupt practices may be involved or if the contract is terminated for default or for convenience.

(11) Covenant Against Contingent Fees. The contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the contractor for the purpose of securing business. For breach or violation of this warranty the grantee shall have the right to annul

this agreement without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

(12) Gratuities.

(A) If the municipality finds, after a notice and hearing, that the contractor, or any of the contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the municipality or the state, in an attempt to secure a contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this agreement, the municipality may, by written notice to the contractor, terminate this agreement. The municipality may also pursue other rights and remedies that the law or this agreement provides. However, the existence of the facts on which the municipality bases such findings shall be in issue and may be reviewed in proceedings under subdivision (8) of this subsection.

(B) In the event this contract is terminated, as provided in subparagraph (A) of this subdivision, the municipality may pursue the same remedies against the contractor as it could pursue in the event of a breach of the contract by the contractor and, as a penalty, in addition to any other damages to which it may be entitled by law, may pursue exemplary damages in an amount (as determined by the grantee) which shall be not less than three nor more than ten times the costs the contractor incurs in providing any such gratuities to any such officer or employee.

(13) Responsibility of the Contractor.

(A) The contractor agrees to perform all work under this agreement in accordance with this agreement's designs, drawings, and specifications.

(B) The contractor warrants and guarantees for a period of one (1) year from the date of substantial completion of the system that the completed system is free from all defects due to faulty materials, equipment or workmanship; and the contractor shall promptly make whatever adjustments or corrections necessary to cure such defects, including repairs of any damage to other parts of the system resulting from such defects. The municipality shall give notice to the contractor of observed defects with reasonable promptness. In the event that the contractor fails to make adjustments, repairs, corrections or other work that may be made necessary by such defect, the municipality may do so and charge the contractor the cost incurred. The performance bond shall remain in full force and effect through the guarantee period.

(C) The contractor's obligations under this subdivision are in addition to the contractor's other express or implied warranties under this agreement or state law and in no way diminish any other rights that the municipality may have against the contractor for faulty material, equipment, or work.

(14) Final Payment. Upon satisfactory completion of the work performed under this agreement, as a condition before final payment under this agreement, or as a termination settlement under this agreement, the contractor shall execute and deliver to the municipality a release of all claims against the municipality arising under or by virtue of this agreement, except claims which are specifically exempted by the contractor to be set forth therein. Unless otherwise provided in this agreement or by state law or otherwise expressly agreed to by the parties to this agreement, final payment under this agreement or settlement upon termination of this agreement shall not constitute a waiver of the municipality's claims against the contractor or his sureties under this agreement or applicable performance and payment bonds.

(h) **Procurement Requirements—General.**

(1) Applicability. This subsection defines the responsibilities of the state and the municipality and the minimum procurement standards for each municipality's procurement system.

(2) Municipality Responsibility.

(A) The municipality is responsible for the settlement and satisfactory completion, in accordance with sound business judgment and good administrative practice, of all contractual and administrative issues arising out of subagreements entered into under the assistance agreement. This includes issuance of invitations for bids or requests for proposals, selection of contractors, award of subagreements, settlement of protests, claims, disputes and other related procurement matters.

(B) The municipality shall maintain a subagreement administration system to assure that contractors perform in accordance with the terms, conditions and specifications of their subagreements.

(C) The municipality shall review its proposed procurement actions to avoid purchasing unnecessary or duplicative items.

(D) The municipality shall consider consolidating its procurement or dividing it into parts to obtain a more economical purchase.

(E) Where appropriate, the municipality shall make an analysis of lease versus purchase alternatives in its procurement actions.

(F) A municipality may request technical assistance from the Commissioner for the administration and enforcement of any subagreement awarded under this section. However, such assistance does not relieve the municipality of its responsibilities under this section, 22a-482-4.

(G) A municipality may use innovative procurement methods or procedures only if it receives the Commissioner's prior written approval.

(3) Municipality Reporting Requirements. The municipality shall request, in writing, the Commissioner's authorization to award each construction subagreement which has an aggregate value over $10,000. The request shall include:

(A) name, address, telephone number and employee identification number of the construction contractor;

(B) amount of the award;

(C) estimated starting and completion dates;

(D) project number, name and site location of the project; and

(E) copy of the tabulations of bids or offers and the name of each bidder or offeror.

(4) Copies of Contract Documents. The municipality shall promptly submit to the Commissioner copies of any prime contract or modification thereof, and revisions to plans and specifications.

(5) Limitations on Subagreement Award.

(A) The municipality shall award subagreements only to responsible contractors that possess the potential ability to perform successfully under the terms and conditions of a proposed procurement. A responsible contractor is one that has:

(i) financial resources, technical qualifications, experience, an organization and facilities adequate to carry out the project, or a demonstrated ability to obtain these;

(ii) resources to meet the completion schedule contained in the subagreement;

(iii) a satisfactory performance record for completion of subagreements;

(iv) accounting and auditing procedures adequate to control property, funds and assets; and

(v) demonstrated compliance or willingness to comply with the civil rights, equal employment opportunity, labor laws and other statutory requirements.

(B) The municipality shall not make awards to contractors who have been suspended or debarred by a Connecticut state agency.

(6) Violations. The municipality shall refer violations of law to the local or state officials having the proper jurisdiction.

(7) Competition.

(A) The municipality shall conduct all procurement transactions in a manner that provides maximum open and free competition.

(B) Procurement practices shall not unduly restrict or eliminate competition. Examples of practices considered to be unduly restrictive include:

(i) noncompetitive practices between firms;

(ii) organizational conflicts of interest;

(iii) unnecessary experience and bonding requirements;

(iv) local laws, ordinances, regulations or procedures which give local bidders or proposers preference over other bidders or proposers in evaluating bids or proposals; and

(v) placing unreasonable requirements on firms in order for them to qualify to do business.

(C) The municipality may use a prequalification list(s) of persons, firms or products if it:

(i) updates its prequalified list(s) at least every six months;

(ii) reviews and acts on each request for prequalification made more than thirty (30) days before the closing date for receipt of proposals or bid opening; and

(iii) gives adequate public notice of its prequalification procedures in accordance with the public notice procedures.

(D) A municipality may not use a prequalified list(s) of persons or firms if the procedure unnecessarily restricts competition.

(8) Profit.

(A) Municipalities shall assure that only fair and reasonable profits are paid to contractors awarded subagreements under state assistance agreements.

(B) The municipality shall negotiate profit as a separate element of price for each subagreement in which there is no price competition or where price is based on cost analysis.

(C) Where the municipality receives two or more bids, profit included in a formally advertised, competitively bid, fixed price subagreement shall be considered reasonable.

(D) Off-the-shelf or catalog supplies are exempt from this subparagraph.

(9) Use of Small, Minority, and Women's Businesses. The municipality shall take affirmative steps to assure that small, minority, and women's businesses are used to the maximum extent practicable. The Commissioner may impose goals as conditions of financial assistance.

(10) Privity of Subagreement. The state shall not be a party to any subagreement nor to any solicitation or request for proposals.

(11) Documentation.

(A) Procurement records and files for procurements in excess of $10,000 shall include the following:

(i) the basis for contractor selection;

(ii) written justification for selection of the procurement method;

(iii) written justification for use of any specification which does not provide for maximum free and open competition;

(iv) written justification for the type of subagreement; and

(v) the basis for award cost or price, including a copy of the cost or price analysis made and documentation of negotiations; and

(B) The municipality shall state the reasons in writing for rejecting any or all bids and the justification for procurements on a noncompetitively negotiated basis and make them available for public inspection.

(12) Specifications.

(A) Nonrestrictive Specifications.

(i) No specification for bids or statement of work shall be written in such a manner as to contain proprietary, exclusionary or discriminatory requirements, other than those based upon performance, unless such requirements are necessary to test or demonstrate a specific thing or to provide for necessary interchangeability of parts and equipment, or at least two brand names or trade names of comparable quality or utility are listed and are followed by the words ''or equal.'' If brand or trade names are specified, the municipality shall be prepared to identify to the Commissioner, or in any protest action, the salient requirements (relating to the minimum needs of the project) which shall be met by any offeror. The single base bid method of solicitation for equipment and parts for determination of a low, responsive bidder may not be utilized. With regard to materials, if a single material is specified, the municipality shall be prepared to substantiate the basis for the selection of the material.

(ii) Project specifications shall, to the extent practicable, provide for maximum use of structures, machines, products, materials, construction methods, and equipment which are readily available through competitive procurement or through standard or proven production techniques, methods, and processes.

(B) Sole Source Restriction. A specification shall not require the use of structures, materials, equipment, or processes which are known to be available only from a sole source, unless the Commissioner determines, in advance, that the municipality's engineer has adequately justified, in writing, that the proposed use meets the particular project's minimum needs or the Commissioner determines that use of a single source is necessary to promote innovation.

(C) Experience Clause Restriction. The general use of experience clauses requiring equipment manufacturers to have a record of satisfactory operation for a specified period of time or of bonds or deposits to guarantee replacement in the event of failure is restricted to special cases where the municipality's engineer adequately justifies any such requirement in writing. Where such justification has been made, submission of a bond or deposit shall be permitted instead of a specified experience period. The period of time for which the bond or deposit is required should not exceed the experience period specified.

(13) Force Account Work.

(A) The municipality shall receive the Commissioner's prior written approval for use of the force account method for any planning, design work or construction work, unless the grant agreement stipulates the force account method.

(B) The Commissioner may approve the force account method upon the municipality's demonstration that it possesses the necessary competence required to accomplish such work and that the work can be accomplished more economically by use of the force account method or emergency circumstances dictate its use.

(C) Use of the force account method for construction work shall generally be limited to minor portions of a project.

(14) Code of Conduct.

(A) The municipality shall maintain a written code or standard of conduct which shall govern the performance of its officers, employees, or agents engaged in the award and administration of subagreements supported by state funds. No employee, officer or agent of the municipality shall participate in the selection, award or administration of a subagreement supported by state funds if a conflict of interest, real or apparent, would be involved.

(B) Such a conflict would arise when:

(i) any employee, officer or agent of the municipality, any member of the immediate families, or their partners, have a financial or other interest in the firm selected for award; or

(ii) an organization which may receive or has been awarded a subagreement employs, or is about to employ, any person under subparagraph (B) (i) of this subdivision.

(C) The municipality's officers, employees or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors or other parties to subagreements.

(D) Municipalities may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal value.

(E) To the extent permitted by state or local law or regulations, the municipality's code of conduct shall provide for penalties, sanctions or other disciplinary actions for violations of the code by the municipality's officers, employees or agents or by contractors or their agents.

(15) Payment to Consultants.

(A) For all state assistance agreements, the state shall limit its participation in the salary rate (excluding overhead) paid to individual consultants retained by a municipality or by a municipality's contractors or subcontractors to the maximum daily rate for a GS-18 federal employee. (Municipality's may, however, pay contractors and subcontractors more than this amount.) This limitation applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. The rate does not include transportation and subsistence costs for travel performed; municipalities shall pay these costs in accordance with their normal travel reimbursement practices.

(B) Subagreements with firms for services which are awarded using these procurement requirements are not affected by this limitation.

(16) Cost and Price Considerations.

(A) The municipality shall conduct a cost analysis of all negotiated change orders and all negotiated subagreements estimated to exceed $10,000.

(B) The municipality shall conduct a price analysis of all formally advertised procurements estimated to exceed $10,000, if there are fewer than three bidders.

(C) For negotiated procurement, contractors and subcontractors shall submit cost or pricing data in support of their proposals to the municipality.

(17) Small Purchases.

(A) Small Purchase Procurement. If the aggregate amount involved in any one procurement transaction does not exceed $10,000, including estimated handling and freight charges, overhead and profit, the municipality may use small purchase procedures.

(B) Small Purchase Procedures. Small purchase procedures are relatively simple procurement methods that are sound and appropriate for procurement of services, supplies or other property costing in the aggregate not more than $10,000.

(C) Requirements for Competition.

(i) Municipalities shall not divide a procurement into smaller parts to avoid the dollar limitation for competitive procurement.

(ii) Municipalities shall obtain price or rate quotations from an adequate number of qualified sources.

(18) Negotiation and Award of Subagreements.

(A) Unless the request for proposals states that an award may be based on initial offers alone, the municipality shall conduct meaningful negotiations with the best qualified offerors with acceptable proposals within the competitive range, and permit revisions to obtain best and final offers. The best qualified offerors shall have equal opportunities to negotiate or revise their proposals. During negotiations, the municipality shall not disclose the identity of competing offerors or any information from competing proposals.

(B) The municipality shall award the subagreement to the responsible offeror whose proposal is determined in writing to be the most advantageous to the municipality, taking into consideration price and other evaluation criteria set forth in the request for proposals.

(C) The municipality shall promptly notify unsuccessful offerors that their proposals were rejected.

(D) The municipality shall document its procurement file to indicate how proposals were evaluated, what factors were used to determine the best qualified offerors within the competitive range, and what factors were used to determine the subagreement award.

(19) Optional Selection Procedure for Negotiation and Award of Subagreements for Architectural and Engineering Services.

(A) The municipality may evaluate and select an architect or engineer using the procedures in this subdivision in place of the procedures in ''Negotiation and Award of Subagreements'' in subdivision (18) of this subsection.

(B) The municipality may use responses from requests for statements of qualifications to determine the most technically qualified architects or engineers.

(C) After selecting and ranking the most qualified architects or engineers, the municipality shall request technical proposals from those architects or engineers and inform them of the evaluation criteria the municipality will use to rank the proposals.

(D) The municipality shall then select and determine, in writing, the best technical proposal.

(E) After selecting the best proposal, the municipality shall attempt to negotiate fair and reasonable compensation with that offeror.

(F) If the municipality and the offeror of the best proposal cannot agree on the amount of compensation, the municipality shall formally terminate negotiations with that offeror. The municipality shall then negotiate with the offeror with the next best proposal. This process shall continue until the municipality reaches agreement on compensation with an offeror with an acceptable proposal. Once the municipality terminates negotiations with an offeror, the municipality cannot go back and renegotiate with that offeror.

(20) Noncompetitive Negotiation Procurement Method. Noncompetitive negotiation may be used only when the award of a subagreement is not feasible under small purchase, formal advertising, or competitive negotiation procedures. The municipality may award a noncompetitively negotiated subagreement only under the following circumstances:

(A) the item is available only from a single source;

(B) a public exigency or emergency exists and the urgency for the requirement will not permit a delay incident to competitive procurement; or

(C) after solicitation from a number of sources, competition is determined to be inadequate.

(21) Use of the Same Architect or Engineer During Construction.

(A) If the municipality is satisfied with the qualifications and performance of the architect or engineer who provided any or all of the planning or design services for the project, it may wish to retain that firm or individual during construction of the project. The municipality may do so without further public notice and evaluation of qualifications provided that it received financial assistance for the planning and/or design services and selected the architect or engineer in accordance with these procurement regulations.

(B) However, if the municipality uses the procedures in subparagraph (A) of this subdivision to retain an architect or engineer, any construction subagreements between the architect or engineer and the municipality shall meet the procurement provisions of subdivision (i) (5) of this section.

(22) Negotiation of Subagreements.

(A) Formal advertising, with adequate purchase descriptions, sealed bids, and public openings shall be the required method of procurement unless negotiation under subparagraph (B) of this subdivision is necessary to accomplish sound procurement.

(B) All negotiated procurement shall be conducted in a manner to provide to the maximum practicable extent open and free competition appropriate to the type of project work to be performed. The municipality is authorized to negotiate subagreements if any of the following conditions exist:

(i) public exigency will not permit the delay incident to formally advertised procurement (e.g. an emergency procurement); or

(ii) the aggregate amount involved does not exceed $10,000; or

(iii) the material or service to be procured is available from only one person or entity. If the procurement is expected to aggregate more than $10,000, the municipality shall document its file with a justification of the need for noncompetitive procurement, and provide such documentation to the Commissioner on request; or

(iv) the procurement is for personal or professional services (including architectural or engineering services) or for any service that a university or other educational institution may render; or

(v) no responsive, responsible bids at acceptable price levels have been received after formal advertising and the Commissioner's prior written approval has been obtained; or

(vi) the procurement is for materials or services where the price is established by law; or

(vii) the procurement is for technical items or equipment requiring standardization and interchangeability of parts with existing equipment; or

(viii) the procurement is for experimental, developmental or research services.

(23) Enforcement. If the Commissioner determines that the municipality has failed to comply with any of the provisions of this subsection, he or she may impose any of the following sanctions:

(A) the grant may be terminated or annulled under subsection (t) of this section; or

(B) project costs directly related to the noncompliance may be disallowed; or

(C) payment otherwise due to the municipality of up to 10 percent may be withheld; or

(D) project work may be suspended under subdivision (g) (6) of this section; or

(E) a noncomplying municipality may be found nonresponsible or ineligible for future state funding assistance or a noncomplying contractor may be found nonresponsible or ineligible for approval for future contract awards under state grants; or

(F) an injunction may be entered or other equitable relief afforded by a court of appropriate jurisdiction; or

(G) such other administrative or judicial action may be instituted if it is legally available and appropriate.

(24) Contract Enforcement and Commissioner Authority. At the request of a municipality, the Commissioner is authorized to provide technical and legal assistance in the administration and enforcement of any contract related to pollution abatement facilities for which a state grant was made and to intervene in any civil action involving the enforcement of such contracts, including contract disputes which are the subject of either arbitration or court action in accordance with the requirements of subdivision (f) (1) of this section.

(i) Architectural/Engineering Procurement Requirements.

(1) Type of Contract (Subagreement).

(A) General. Cost-plus-percentage-of-cost and percentage-of-construction-cost contracts are prohibited. Cost reimbursement, fixed price, or per diem contracts or combinations of these may be negotiated for architectural or engineering services. A fixed price contract is generally used only when the scope and extent of work to be performed is clearly defined. In most other cases, a cost reimbursement type of contract is more appropriate. A per diem contract may be used if no other type of contract is appropriate. An incentive fee may be used if the municipality submits an adequate independent cost estimate and price comparison.

(B) Cost Reimbursement Contract. Each cost reimbursement contract shall clearly establish a cost ceiling which the engineer may not exceed without formally amending the contract and a fixed dollar profit which may not be increased except in the case of a contract amendment to increase the scope of work.

(C) Fixed Price Contract. An acceptable fixed price contract is one which establishes a guaranteed maximum price which may not be increased unless a contract amendment increases the scope of work.

(D) Compensation Procedures. If, under either a cost reimbursement or fixed price contract, the municipality desires to use a multiplier type of compensation, all of the following must apply:

(i) the multiplier and the portions of the multiplier allocable to overhead and allocable to profit have been specifically negotiated;

(ii) the portion of the multiplier allocable to overhead includes only allowable items of cost under the cost principles;

(iii) the portions of the multiplier allocable to profit and allocable to overhead have been separately identified in the contract; and

(iv) the fixed price contract includes a guaranteed maximum price for completion of the specifically defined scope of work; and the cost reimbursement contract includes a fixed dollar profit which may not be increased except in the case of a contract amendment which increases the scope of work.

(E) Per Diem Contracts. A per diem agreement may be utilized only after a determination that a fixed price or cost reimbursement type contract is not appropriate. Per diem agreements should be used only to a limited extent, e.g., where the first task under the planning agreement involves establishing the scope and cost of succeeding planning tasks or for incidental services such as expert testimony or

intermittent professional or testing services. (Resident engineer and resident inspection services should generally be compensated at cost plus fixed fee). Cost and profit included in the per diem rate must be specifically negotiated and displayed separately in the engineer's proposal.

The contract must clearly establish a price ceiling which may not be exceeded without formally amending the contract.

(2) Public Notice. Adequate public notice must be given of the requirement for architectural or engineering services for all subagreements.

(A) Public Announcement. A notice of request for qualifications should be published in professional journals, newspapers, or publications of general circulation over a reasonable area and, in addition, if desired, through posted public notices or written notification directed to interested persons, firms, or professional organizations inviting the submission of statements of qualifications. The announcement must clearly state the deadline and place for submission of qualification statements.

(B) Exceptions. Public notice is not required under the following circumstances:

(i) for design or construction phases of a grant funded project if the municipality is satisfied with the qualifications and performance of any engineer who performed all or any part of the planning or design work and the engineer has the capacity to perform the subsequent steps; and

(ii) the municipality desires the same engineer to provide architectural or engineering services for the subsequent steps or for subsequent segments of design work in one project, if a single pollution abatement facility is segmented into two or more construction projects. If the design work is accordingly segmented so that the initial contract for preparation of construction drawings and specifications does not cover the entire pollution abatement facility to be built under one grant then the municipality may use the same engineering firm that was selected for the initial segment of design work for subsequent segments.

(3) Evaluation of Qualifications.

(A) The municipality shall review the qualifications of firms which responded to the announcement or were on the prequalified list and shall uniformly evaluate the firms.

(B) Qualifications shall be evaluated through an objective process (e.g., the appointment of a board or committee which, to the extent practicable, should include persons with technical skills).

(C) Criteria which should be considered in the evaluation of candidates for submission of proposals should include:

(i) specialized experience and technical competence of the candidate or firm and its personnel (including a joint venture, association or professional subcontractor) considering the type of services required and the complexity of the project;

(ii) past record of performance on contracts with the municipality, other government agencies or public bodies, and with private industry, including such factors as control of costs, quality of work, and ability to meet schedules;

(iii) the candidate's capacity to perform the work (including any specialized services) within the time limitations, considering the firm's current and planned workload;

(iv) the candidate's familiarity with the types of problems applicable to the project; and

(v) avoidance of personal and organizational conflicts of interest.

(4) Solicitation and Evaluation of Proposals.

(A) Solicitation of Professional Services Proposals.

(i) Requests for professional services proposals shall be sent to no fewer than three candidates who either responded to the public announcement or were selected from the prequalified list, unless, after good faith effort to solicit qualifications, fewer than three qualified candidates respond, in which case all qualified candidates shall be provided requests for proposals.

(ii) Requests for professional services proposals shall be in writing and must contain the information necessary to enable a prospective offeror to prepare a proposal properly. The request for proposals shall include a solicitation statement and shall inform offerors of the evaluation criteria.

(iii) Submission deadline. Requests for proposals shall clearly state the deadline and place for submission.

(B) Evaluation of Proposals.

(i) All proposals submitted in response to the request for professional services proposals shall be uniformly evaluated. The municipality shall also evaluate the candidates' proposed method of accomplishing the work required.

(ii) Proposals shall be evaluated through an objective process (e.g., the appointment of a board or committee) which, to the extent practicable, should include persons with technical skills. Oral (including telephone) or written interviews should be conducted with top rated proposers and information derived therefrom shall be treated on a confidential basis.

(iii) Municipalities shall base their determinations of qualified offerors and acceptable proposals solely on the evaluation criteria stated in the request for proposals.

(5) Negotiation.

(A) Municipalities are responsible for negotiation of their contracts for architectural or engineering services. Contract procurement, including negotiation, may be performed by the municipality directly or by another person or firm retained for that purpose. Contract negotiations may include the services of technical, legal, audit, or other specialists to the extent appropriate.

(B) Negotiations may be conducted in accordance with state or local requirements, as long as they meet the minimum requirements as set forth in this subdivision.

(C) The object of negotiations with any candidate shall be to reach agreement on the provisions of the proposed contract. The municipality and the candidate shall discuss, at a minimum:

(i) the scope and extent of work and other essential requirements;

(ii) identification of the personnel and facilities necessary to accomplish the work within the required time including, where needed, employment of additional personnel, subcontracting, joint venture, etc;

(iii) provisions of the required technical services in accordance with regulations and criteria established for the project; and

(iv) a fair and reasonable price for the required work, to be determined in accordance with the cost and profit considerations.

(6) Cost and Price Considerations.

(A) The candidate(s) selected for negotiation shall submit to the municipality for review sufficient cost and pricing data to enable the municipality to ascertain the necessity and reasonableness of costs and amounts proposed and the allowability and eligibility of costs proposed.

(B) The municipality shall submit the following to the Commissioner for review:

(i) documentation of the public notice of need for architectural or engineering services and selection procedures;

(ii) the cost and pricing data the selected engineer submitted;

(iii) a certification of review and acceptance of the selected engineer's cost and price; and

(iv) a copy of the proposed subagreement.

(C) The Commissioner shall review the complete subagreement procurement procedure and approve the municipality's compliance with appropriate procedures before the municipality awards the subagreement.

(D) Cost Review.

(i) The municipality shall review proposed subagreement costs.

(ii) At a minimum, proposed subagreement costs shall be presented on EPA form 5700-41 on which the selected engineer shall certify that the proposed costs reflect complete, current, and accurate cost and pricing data applicable to the date of anticipated subagreement award.

(iii) In addition to the specific elements of cost, the estimated amount of profit shall be set forth separately in the cost summary for fixed price contracts and a maximum total dollar amount of profit shall be set forth separately in the cost summary for cost reimbursement contracts.

(iv) The municipality may require more detailed cost data than the form requires in order to substantiate the reasonableness of proposed subagreement costs. The Commissioner may require more detailed documentation only when the selected engineer is unable to certify that the cost and pricing data used are complete, current, and accurate. The Commissioner may, on a selected basis, perform a pre-award cost analysis on any subagreement. A provisional overhead rate should be agreed upon before contract award.

(v) The engineer shall have an accounting system which accounts for costs in accordance with generally accepted accounting principles. This system shall provide for the identification, accumulation, and segregation of allowable and unallowable project costs among projects. Allowable project costs shall be determined by the Commissioner. The engineer shall propose and account for costs in a manner consistent with his normal accounting procedures.

(vi) Subagreements awarded on the basis of a review of a cost element summary and a certification of complete, current, and accurate cost and pricing data shall be subject to downward renegotiation or recoupment of funds where the Commissioner determines that such certification was not based on complete, current, and accurate cost and pricing data or was not based on allowable costs at the time of award.

(7) Profit. The objective of negotiations shall be the exercise of sound judgment and good administrative practice including the determination of a fair and reasonable profit based on the firm's assumption of risk and input to total performance and not merely the application of a predetermined percentage factor. For the purpose of subagreements under state grants, profit is defined as the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price. (This definition of profit may vary from the firm's definition of profit for other purposes.) Profit on a subagreement and each amendment to a subagreement under a grant should be sufficient to attract engineers who possess the talent and skills necessary for the accomplishment of project objectives and to stimulate efficient and expeditious completion of the project. Where cost review is performed, the municipality should review the estimate of profit as it reviews all other elements of price.

(8) Award of Subagreement.

(A) The municipality shall obtain the written approval of the Commissioner prior to the award of any subagreement or amendment.

(B) The municipality shall promptly notify unsuccessful candidates.

(9) Required Solicitation and Subagreement Provisions.

(A) Required solicitation statement. Requests for qualifications or proposals must include the following statement, as well as the proposed terms of the subagreement.

Any contract awarded under this request for qualifications or professional proposals is expected to be funded in part by the State of Connecticut, Department of Environmental Protection. This procurement will be subject to requirements contained in subsections (h), (i) and (o) of this section. The State of Connecticut will not be a party to this request for qualifications or professional proposals or any resulting contract.

(B) Content of subagreement. Each subagreement shall adequately define the scope and extent of project work; the time for performance and completion of the contract work including, where appropriate, dates for completion of significant project tasks; personnel and facilities necessary to accomplish the work within the required time; the extent of subcontracting and consultant agreements; and payment provisions. If any of these elements cannot be defined adequately for later tasks or steps at the time of contract execution, the contract should not include the subsequent tasks or steps at that time.

(10) Subagreement Payments. The municipality shall make payment to the engineer in accordance with the payment schedule incorporated in the engineering agreement. Any retainage is at the option of the municipality. No payment request made by the engineer under the agreement may exceed the estimated amount and value of the work and services performed.

(11) Subcontracts under Subagreements. Neither award and execution of subcontracts under a prime contract for architectural or engineering services nor the procurement and negotiation procedures used by the engineer in awarding such subcontracts are required to comply with any of the provisions, selection procedures, policies or principles set forth herein.

(j) **Construction Contract Procurement Requirements.** (This section applies to construction contracts in excess of $10,000 awarded by municipalities for any construction projects.)

(1) Type of Contract. Each contract shall be a fixed price (lump sum or unit price or a combination of the two) contract, unless the Commissioner gives advance written approval for the municipality to use some other acceptable type of contract. The cost-plus-percentage-of-cost contract shall not be used in any event.

(2) Formal Advertising. Each contract shall be awarded after formal advertising, unless negotitations are permitted in accordance with subdivision (18) of subsection (h) of this section. Formal advertising shall be in accordance with the following:

(A) Adequate Public Notice. The municipality will cause adequate notice to be given of the solicitation by publication in newspapers or journals of general circulation beyond the municipality's locality (statewide, generally), inviting bids on the project work and stating the method by which bidding documents may be obtained or examined. Where the estimated cost of construction is 10 million dollars or more, the municipality shall publish the notice in trade journals of nationwide distribution. The municipality may solicit bids directly from bidders if it maintains a bidders list.

(B) Adequate Time for Preparing Bids. Adequate time, generally not less than 30 days, shall be allowed between the date when public notice is first published and the date by which bids must be submitted. Bidding documents including specifications and drawings shall be available to prospective bidders from the date when such notice is first published.

(C) Adequate Bidding Documents. The municipality shall prepare a reasonable number of bidding documents, invitations for bids and shall furnish them upon request on a first-come, first-serve basis. The municipality shall maintain a complete set of bidding documents and shall make them available for inspection and copying by any party. The bidding documents shall include:

(i) a complete statement of the work to be performed, including necessary drawings and specifications, and the required completion schedule;

(ii) the terms and conditions of the contract to be awarded;

(iii) a clear explanation of the method of bidding, the method of evaluation of bid prices, and the basis and method for award of the contract;

(iv) responsibility requirements or criteria which will be employed in evaluating bidders;

(v) the following statement:

Any contract or contracts awarded under this invitation for bids are expected to be funded in part by the State of Connecticut, Department of Environmental Protection. Neither the State of Connecticut nor any of its departments, agencies or employees is or will be a party to this invitation for bids or any resulting contract. This procurement will be subject to the requirements contained in subsections (h), (j) and (o) of this section;

(vi) a copy of subsections (h), (j) and (o) of this section; and

(vii) the prevailing State Wage Determination, as applicable.

(D) Sealed Bids. The municipality shall provide for bidding by sealed bid and for the safeguarding of bids received until public opening.

(E) Addenda to Bidding Documents. If a municipality desires to amend any part of the bidding documents (including drawings and specifications) during the period when bids are being prepared, the addenda shall be communicated in writing to all firms which have obtained bidding documents at least five (5) working days prior to the bid opening.

(F) Bid Modifications. A firm which has submitted a bid shall be allowed to modify or withdraw its bid before the time of bid opening.

(G) Public Opening of Bids. The municipality shall provide for a public opening of bids at the place, date and time announced in the bidding documents.

(H) Award to the Low, Responsive, Responsible Bidder.

(i) After bids are opened, the municipality shall evaluate them in accordance with the methods and criteria set forth in the bidding documents.

(ii) The municipality may reserve the right to reject all bids. Unless all bids are rejected for good cause, award shall be made to the low, responsive, responsible bidder.

(iii) If the municipality intends to make the award to a firm which did not submit the lowest bid, it shall prepare a written statement before any award, explaining why each lower bidder was deemed nonresponsible or nonresponsive. The municipality shall retain such statement in its files and forward a copy to the Commissioner for review.

(iv) Local laws, ordinances, regulations or procedures which are designed or which operate to give local bidders preference over other bidders shall not be employed in evaluating bids.

(v) If an unresolved procurement review issue or a protest relates only to award of a subcontract or procurement of an item under the prime contract and resolution of that issue or protest is unduly delaying performance of the prime contract, the Commissioner may authorize award and performance of the prime contract before

resolution of the issue or protest, if the Commissioner determines that resolution of the protest will not affect the placement of the prime contract bidders and will not materially affect initial performance of the prime contract; and that award of the prime contract is in the state's best interest, will not materially affect the resolution of the protest, and is not barred by state or local law.

(vi) The municipality shall not reject a bid as nonresponsive for failure to list or otherwise indicate the selection of a subcontractor(s) or equipment, unless the municipality has unambiguously stated in the solicitation documents that such failure to list shall render a bid nonresponsive and shall cause rejection of a bid.

(k) **Negotiation of Contract Amendments (Change Orders).**

(1) The municipality is responsible for the negotiation of construction contract change orders. This function may be performed by the municipality directly or, if authorized, by its engineer. During negotiations with the contractor the municipality shall:

(A) make certain that the contractor has a clear understanding of the scope and extent of work and other essential requirements;

(B) assure that the contractor demonstrates that he will make available or will obtain the necessary personnel, equipment and materials to accomplish the work within the required time; and

(C) assure a fair and reasonable price for the required work.

(2) The contract price or time may be changed only by a change order. When negotiations are required, they shall be conducted in accordance with subdivisions (3) and (4) of this subsection as appropriate. The value of any work covered by a change order, or of any claim for increase or decrease in the contract price, shall be determined by the method set forth in subparagraphs (A) to (C) of this subdivision, whichever is most advantageous to the municipality.

(A) Unit prices.

(i) Original bid items. Unit prices previously approved are acceptable for pricing changes of original bid items. However, when changes in quantities exceed 15 percent of the original bid quantity and the total dollar change of that bid item is significant, the municipality shall review the unit price to determine if a new unit price should be negotiated.

(ii) New items. Unit prices of new items shall be negotiated.

(B) Lump Sums shall be negotiated.

(C) Cost reimbursement. The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work plus an amount to be agreed upon to cover the cost of general overhead and profit to be negotiated.

(3) For each change order not in excess of $100,000 the contractor shall submit sufficient cost and pricing data to the municipality to enable the municipality to determine the necessity and reasonableness of costs and amounts proposed, and the allowability and eligibility of costs proposed.

(4) For each change order in excess of $100,000, the contractor shall submit to the municipality for review sufficient cost and pricing data as described in subparagraphs (A) to (E) of this subdivision to enable the municipality to ascertain the necessity and reasonableness of costs and amounts proposed, and the allowability and eligibility of costs proposed.

(A) The contractor shall certify that proposed costs reflect complete, current, and accurate cost and pricing data applicable to the date of the change order.

(B) In addition to the specific elements of cost, the estimated amount of profit shall be set forth separately in the cost summary for fixed price change orders and a specific total dollar amount of profit will be set forth separately in the cost summary for cost reimbursement change orders.

(C) The municipality may require more detailed cost data in order to substantiate the reasonableness of proposed change order costs. The Commissioner may, on a selected basis, perform a detailed cost analysis on any change order.

(D) For costs under cost reimbursement change orders, the contractor shall have an accounting system which accounts for such costs in accordance with generally accepted accounting principles. This system shall provide for the identification, accumulation and segregation of allowable and unallowable change orders. Allowable change order costs shall be determined in accordance with subsections (a), (b), (c), (d) and (e) of this section. The contractor shall propose and account for such costs in a manner consistent with his normal accounting procedures.

(E) Change orders awarded on the basis of review of a cost element summary and a certification of complete, current, and accurate cost and pricing data shall be subject to downward renegotiation and recoupment of funds where a subsequent audit substantiates that such certification was not based on complete, current and accurate cost and pricing data.

(5) Review by Commissioner. The municipality shall submit, before the execution of any change order in excess of $100,000, to the Commissioner for review and approval:

(A) the cost and pricing data the contractor submitted;

(B) a certification of review and acceptance of the contractor's cost or price; and

(C) a copy of the proposed change order.

(6) Profit. The objective of negotiations shall be the exercise of sound business judgment and good administrative practice, including the determination of a fair and reasonable profit based on the contractor's assumption of risk and input to total performance, and not merely the application of a predetermined percentage factor. For the purpose of negotiated change orders to construction contracts profit is defined as the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price. The municipality should review the estimate of profit as it reviews all other elements of price.

(7) Related Work. Related work shall not be split into two amendments or change orders merely to keep it under $100,000 and thereby avoid the requirements of subdivision (4) of this subsection. For change orders which include both additive and deductive items:

(A) if any single item (additive or deductive) exceeds $100,000 the requirements of subdivision (4) of this subsection shall be applicable;

(B) if no single additive or deductive item has a value of $100,000 but the total price of the change order is over $100,000, the requirements of subdivision (4) of this subsection shall be applicable; and

(C) if the total of additive items of work in the change order exceeds $100,000, or the total of deductive items of work in the change order exceeds $100,000, and the net price of the change order is less than $100,000, the requirements of subdivision (4) of this subsection shall be applicable.

(*l*) **Subcontracts under Construction Contracts.**

(1) The award or execution of subcontracts by a prime contractor under a construction contract awarded to the prime contractor by the municipality and the procurement and negotiation procedures used by prime contractors in awarding or executing

subcontracts are not required to comply with any of the provisions, selection procedures, policies or principles set forth in subsection (h) or (j) of this section, except those specifically stated in this section. In addition, the bid protest procedures in subsection (o) of this section are not available to parties executing subcontracts with prime contractors, except as specifically provided in subsection (o) of this section.

(2) The award or execution of subcontracts by a prime contractor under a formally advertised, competitively bid, fixed price construction contract awarded to the prime contractor by the municipality, and the procurement and negotiation procedures used by such prime contractors in awarding or executing such subcontracts shall comply with any municipality procurement system, state, small, minority and women's business policy (section 22a-482-4 (h) (9)), negotiation of contract amendments (section 22a-482-4 (k)), and subdivisions (8) and (9) of section 22a-482-4 (g).

(m) **Progress Payments to Contractors.**

(1) Except as state law otherwise provides, municipalities shall make prompt progress payments to prime contractors and prime contractors should make prompt progress payments to subcontractors and suppliers for eligible construction, material, and equipment costs, including those of undelivered, specifically manufactured equipment, incurred under a contract under this program. The Clean Water Fund shall only be obligated to pay the municipality amounts that the municipality is actually going to pay contractors.

(2) Conditions of Progress Payments. For purposes of this subsection, progress payments are defined as follows:

(A) payments for work in place; or

(B) payments for materials or equipment which have been delivered to the construction site, or which are stockpiled in the vicinity of the construction site, in accordance with the terms of the contract, when conditional or final acceptance is made by or for the municipality. The municipality shall assure that items for which progress payments have been made are adequately insured and are protected through appropriate security measures. Costs of such insurance and security are allowable costs; or

(C) payments for undelivered, specifically manufactured items or equipment (excluding off-the-shelf or catalog items) as work on them progresses. Such payments shall be made if provisions therefor are included in the bid and contract documents. Such provisions may be included at the option of the municipality only when all of the following conditions exist:

(i) the equipment is so designated in the project specifications;

(ii) the equipment to be specifically manufactured for the project could not be readily utilized on, nor diverted to, another job; and

(iii) a fabrication period of more than 6 months is anticipated.

(3) Protection of Progress Payments Made for Specifically Manufactured Equipment. The municipality shall assure protection of the state's interest in progress payments made for items or equipment referred to in subparagraph (2) (C) of this subsection. The protection shall be acceptable to the municipality and shall take the form of:

(A) securities negotiable without recourse, condition or restrictions, a progress payment bond, or an irrevocable letter of credit provided to the municipality through the prime contractor by the subcontractor or supplier; and

(B) for items or equipment in excess of $200,000 in value which are manufactured in a jurisdiction in which the Uniform Commercial Code is applicable, the creation

and perfection of a security interest under the Uniform Commercial Code which is reasonably adequate to protect the interests of the municipality.

(4) Limitations on Progress Payments for Specifically Manufactured Equipment.

(A) Progress payments made for specifically manufactured equipment or items shall be limited to the following:

(i) a first payment upon submission by the prime contractor of shop drawings for the equipment or items in an amount not exceeding 15 percent of the contract or item price plus appropriate and allowable higher tier costs; and

(ii) subsequent to the municipality's release or approval for manufacture, additional payments not more frequently than monthly thereafter up to 75 percent of the contract or item price plus appropriate and allowable higher tier costs. However, payment may also be made in accordance with the contract and grant terms and conditions for ancillary onsite work before delivery of the specifically manufactured equipment or items.

(B) In no case may progress payments for undelivered equipment or items under subparagraphs (A) (i) or (A) (ii) of this subdivision be made in an amount greater than 75 percent of the cumulative incurred costs allocable to contract performance with respect to the equipment or items. Submission of a request for any such progress payments shall be accompanied by a certification furnished by the fabricator of the equipment or item that the amount of progress payment claimed constitutes not more than 75 percent of cumulative incurred costs allocable to contract performance and, in addition, in the case of the first progress payment request, a certification that the amount claimed does not exceed 15 percent of the contract or item price quoted by the fabricator.

(C) As used in this subsection, the term ''costs allocable to contract performance'' with respect to undelivered equipment or items includes all expenses of contract performance which are reasonable, allocable to the contract, consistent with sound and generally accepted accounting principles and practices consistently applied and which are not excluded by the contract.

(5) Enforcement. A subcontractor or supplier which is determined by the Commissioner to have frustrated the intent of the provisions regarding progress payments for major equipment or specifically manufactured equipment through intentional forfeiture of its bond or failure to deliver the equipment may be determined nonresponsible and ineligible for further work under state funded projects.

(6) Contract Provisions. Where applicable, appropriate provisions regarding progress payments shall be included in each contract and subcontract.

(7) Implementation. The foregoing progress payments policy should be implemented in invitations for bids for projects funded by the Clean Water Fund. If provision for progress payments is made after contract award, it shall be for consideration that the municipality deems adequate.

(n) **Retention from Progress Payments.**

(1) The municipality may retain a portion of the amount otherwise due the contractor. The amount the municipality retains shall be limited to the following:

(A) withholding of not more than 5 percent of the payment claimed until work is 50 percent complete;

(B) when work is 50 percent complete, reduction of the withholding to 2 percent of the dollar value of all work satisfactorily completed to date, provided that the contractor is making satisfactory progress and there is no specific cause for greater withholding;

(C) when the work is substantially complete (operational or beneficial occupancy), the withheld amount shall be further reduced below 2 percent to only that amount necessary to assure completion;

(D) the municipality may reinstate up to 5 percent withholding if the municipality determines, at its discretion, that the contractor is not making satisfactory progress or there is other specific cause for such withholding; and

(E) the municipality may accept securities, negotiable without recourse, condition or restrictions, a release of retainage bond, or an irrevocable letter of credit provided by the contractor instead of all or part of the cash retainage.

(2) The requirements set out in subdivision (1) of this subsection shall be implemented with respect to all construction projects. Appropriate provision to assure compliance with these requirements shall be included in the bid documents for such projects initially or by addendum before the bid submission date and as a special condition in the funding agreement or in an amendment which is issued by the Commissioner.

(3) A municipality which delays disbursement to contractors of funds will be required to credit to the Clean Water Fund all interest earned on those funds and will be responsible for any and all tax law violations which occur as a result of their actions.

(o) **Protests.**

(1) General. A protest based upon an alleged violation of the procurement requirements may be filed against a municipality's procurement action by a party with an adversely affected direct financial interest. Any such protest must be received by the municipality within the time period in subparagraph (2) (A) of this subsection. The municipality is responsible for resolution of the protest before taking the protested action, in accordance with subdivision (4) of this subsection, except as otherwise provided by subdivision (9) of this subsection or subparagraph (j) (2) (H) (v).

(2) Time Limitations.

(A) A protest under subdivision (4) of this subsection should be made as early as possible during the procurement process to avoid disruption of, or unnecessary delay to, the procurement process. A protest authorized by subdivision (4) of this subsection shall be received by the municipality within one week after the basis for the protest is known or should have been known, whichever is earlier.

(i) In the case of an alleged violation of the specification requirements of subdivision (h) (12) of this section (e.g., that a product fails to qualify as an ''or equal''), a protest need not be filed prior to the opening of bids. The municipality may resolve the issue before receipt of bids or proposals through a written or other formal determination, after notice and opportunity to comment is afforded to any party with a direct financial interest.

(ii) When an alleged violation of the specification requirements of subdivision (h) (12) of this section first arises subsequent to the receipt of bids or proposals, the municipality shall make a determination on the protest, if the protest was received by the municipality within one week of the time that the municipality's written or other formal notice is first received.

(B) A protest authorized under this subsection shall be filed in a court of competent jurisdiction within the locality of the municipality within one week after the complainant has received the municipality's determination.

(C) If a protest is mailed, the complaining party bears the risk of nondelivery within the required time period. All documents transmitted in accordance with this section shall be mailed (by certified mail return receipt requested) or otherwise

delivered in a manner which will objectively establish the date of receipt. Initiation of protest actions under subdivisions (4) or (5) of this subsection may be made by brief telegraphic notice accompanied by prompt mailing or other delivery of a more detailed statement of the basis for the protest. Telephone protests will not be considered.

(3) Other Initial Requirements.

(A) The initial protest document shall briefly state the basis for the protest and should:

(i) refer to the specific portions of sections 22a-482-1 to 22a-482-4 which allegedly prohibit the procurement action;

(ii) specifically request a determination pursuant to this section;

(iii) identify the specific procurement document(s) or portion(s) of them in issue; and

(iv) include the name, telephone number, and address of the person representing the protesting party.

(B) The party filing the protest shall concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest which may be adversely affected by the determination of the protest (all bidders or proposers who appear to have a substantial and reasonable prospect of receiving an award if the protest is denied or sustained) and to the Commissioner.

(4) Municipality Determination.

(A) The municipality is responsible for the initial resolution of protests based upon alleged violations of the procurement requirements.

(B) When the municipality receives a timely written protest, it must defer the protested procurement action in accordance with subdivision (7) of this subsection; and:

(i) afford the complaining party and interested parties an opportunity to present arguments in support of their views in writing or at a conference or other suitable meeting (such as a city council meeting);

(ii) inform the complainant and other interested parties of the procedures which the municipality will observe for resolution of the protest;

(iii) obtain an appropriate extension of the period for acceptance of the bid and bid bond(s) of each interested party, where applicable (failure to agree to a suitable extension of such bid and bid bond(s) by the party which initiated the protest shall be cause for summary dismissal of the protest by the municipality or the Commissioner); and

(iv) promptly deliver (by certified mail, return receipt requested, or by personal delivery) its written determination of the protest to the complaining party and to each other participating party.

(C) The municipality's determination shall be accompanied by a legal opinion addressing issues arising under state or local law, if any and, when construction is involved, by an engineering report, if appropriate.

(D) The municipality should decide the protest as promptly as possible, generally within 3 weeks after receipt of a protest, unless extenuating circumstances require a longer period of time for proper resolution of the protest.

(5) Procedures.

(A) Where resolution of an issue properly raised with respect to a procurement requirement necessitates prior or collateral resolution of a legal issue arising under state or local law and such law is not clearly established in published legal decisions of the state or other relevant jurisdiction, the municipality may rely upon:

(i) an opinion of the municipality's legal counsel adequately addressing the issue; or

(ii) the established or consistent practice of the municipality, to the extent appropriate; or

(iii) the law of other local jurisdictions as established in published legal decisions; or

(iv) if none of the foregoing adequately resolve the issue, published decisions of the Comptroller General of the United States (U.S. General Accounting Office) or of the federal or state courts addressing federal or state requirements comparable to procurement requirements of this section.

(B) A party who submits a document subsequent to initiation of a protest proceeding shall simultaneously furnish each of the other parties with a copy of such document.

(C) The procedures established herein are not intended to preclude informal resolution or voluntary withdrawal of protests. A complainant may withdraw its appeal at any time and the protest proceedings shall thereupon be terminated.

(D) A protest may be dismissed for failure to comply with procedural requirements set forth in this section.

(6) Burden of Proof.

(A) In protest proceedings, if the municipality proposes to award a formally advertised, competitively bid, fixed price contract to a party who has submitted the apparent lowest price, the party initiating the protest will bear the burden of proof.

(B) In protest proceedings:

(i) if the municipality proposes to award a formally advertised, competitively bid, fixed price contract to a bidder other than the bidder which submitted the apparent lowest price, the municipality shall bear the burden of proving that its determination concerning responsiveness is in accordance with Section 22a-482-1 to 22a-482-4; and

(ii) if the basis for the municipality's determination is a finding of nonresponsibility, the municipality shall establish and substantiate the basis for its determination and shall adequately establish that such determination has been made in good faith.

(7) Deferral of Procurement Action. Upon receipt of a protest, the municipality shall defer the protested procurement action (for example, defer the issuance of solicitations, contract award, or issuance of notice to proceed under a contract) until ten days after delivery of its determination to the participating parties. The municipality may receive or open bids at its own risk, if it considers this to be in its best interest. When the Commissioner has received a written protest, he or she shall notify the municipality promptly to defer its protested procurement action until notified of the formal or informal resolution of the protest.

(8) Enforcement. Noncompliance with the procurement provisions by the municipality shall be cause for enforcement action in accordance with one or more of the provisions of subdivision (h) (23) of this section.

(9) Limitation. A protest may not be filed with respect to the following:

(A) issues not arising under the procurement provisions; or

(B) issues relating to the selection of a consulting engineer, provided that a protest may be filed only with respect to the mandatory procedural requirements of subsection (i) of this section; or

(C) issues primarily determined by local law or ordinance and as to which the Commissioner, upon review, determines that there is no contravening state requirement and that the municipality's action has a rational basis; or

(D) provisions of state regulations applicable to direct state contracts unless such provisions are explicitly referred to or incorporated in section 22a-482; or

(E) basic project design determinations; or

(F) award of subcontracts or issuance of purchase orders under formally advertised, competitively bid, lump sum construction contracts. However, protests may be made to alleged violations of the following:

(i) specification requirements of subdivision (h) (12) of this section; or

(ii) provisions applicable to the procurement procedures, negotiation or award of subcontracts or issuance of purchase orders under subsection (1) of this section.

(p) **Funding Assistance Conditions.** Financing for pollution abatement facilities shall be subject to the following conditions:

(1) Municipality Responsibilities.

(A) Review or approval of engineering reports, plans and specifications or other documents by the Commissioner is for administrative purposes only and does not relieve the municipality of its responsibility to properly plan, design, build and effectively operate and maintain the pollution abatement facilities described in the funding assistance agreement as required under law, regulations, permits, and good management practices. The Commissioner is not responsible for increased building costs resulting from defects in the plans, design drawings and specifications or other subagreement documents.

(B) By its acceptance of financing, the municipality agrees to complete the pollution abatement facilities in accordance with the engineering report, plans and specifications and related documents approved by the Commissioner and to maintain and operate the pollution abatement facilities to meet the enforceable requirements of the permit issued pursuant to section 22a-430 of the Connecticut General Statutes for the design life of the pollution abatement facilities. The Commissioner may seek specific enforcement or recovery of funds from the municipality, or take other appropriate action if he or she determines that the municipality has failed to make good faith efforts to meet its obligations under the grant/loan agreement.

(C) The municipality agrees to pay the non-state costs of the pollution abatement facilities construction associated with the project and commits itself to complete the construction of the operable pollution abatement facilities and the complete pollution abatement facilities of which the project is a part.

(2) Nondiscrimination. All contracts are subject to the Governor's Executive Order No. Three and to the guidelines and rules issued by the State Labor Commission to implement Executive Order No. Three.

(3) Wage Rates. Contracts involving construction work are subject to the appropriate state wage rates issued by the State Labor Commissioner and federal wage rates issued by the United States Department of Labor.

(4) Access. The municipality shall insure that the Commissioner and his or her duly authorized agents shall have access to the project work whenever it is in preparation or progress. The municipality shall provide proper facilities for access and inspection. The municipality shall allow any authorized agent of the state to have access to any books, documents, plans, reports, papers, and other records of the contractor which are pertinent to the project for the purpose of making audit, examination, excerpts, copies and transcriptions. The municipality shall insure that a party to a subagreement shall provide access to the project work, sites, documents, and records.

(5) Project Changes.

(A) Minor changes in the project work that are consistent with the objectives of the project and within the scope of the funding agreement do not require the execution of a formal amendment before the municipality's implementation of the change. However, if such changes increase the costs of the project, the amount of the funding provided by the funding agreement may only be increased by a formal amendment.

(B) The municipality shall receive from the Commissioner a formal amendment before implementing changes which:

(i) alter the project performance standards; or

(ii) alter the type of treatment facilities provided by the project; or

(iii) delay or accelerate the project schedule; or

(iv) substantially alter the engineering report, design drawings and specifications, or the location, size, capacity, or quality of any major part of the project.

(6) Operation and Maintenance.

(A) The municipality shall make provisions satisfactory to the Commissioner for assuring economical and effective operation and maintenance of the pollution abatement facilities in accordance with a plan of operation approved by the Commissioner.

(B) The Commissioner shall not pay more than 50 percent of the grant share of any project unless the municipality has an approved final plan of operation and shall not pay more than 90 percent of the grant share of any project unless the municipality has an approved operation and maintenance manual.

(7) Adoption of User Charge System and Sewer Use Ordinance.

The municipality shall adopt the sewer use ordinance and implement the user charge system developed under subsections (e) and (f) of 22a-482-3 and approved by the Commissioner before the pollution abatement facilities are placed in operation. Further, the municipality shall implement the user charge system and sewer use ordinance for the useful life of the pollution abatement facilities.

(8) Value Engineering.

The municipality shall comply with the applicable requirements of section 22a-482-3 (d) for value engineering.

(9) Project Initiation and Completion.

(A) The municipality shall expeditiously initiate and complete the project in accordance with the project schedule contained in the funding agreement.

(B) The municipality shall initiate procurement action for building the project promptly after the award of financing. The Commissioner may annul or terminate the funding agreement if the municipality has not awarded the subagreements and issued a notice to proceed, where one is required, for building all significant elements of the project within twelve (12) months of the closing. Failure to promptly award all subagreement(s) for building the project shall result in a limitation on allowable grant costs.

(10) Municipality Responsibility for Project Performance.

(A) The municipality shall select the engineer or engineering firm principally responsible for either supervising construction or providing architectural and engineering services during construction as the prime engineer to provide the following services during the first year following the initiation of operation:

(i) direct the operation of the project and revise the operation and maintenance manual for the project as necessary to accommodate actual operating experience;

(ii) train or provide for training of operating personnel, including the preparation of curricula and training material for operating personnel; and

(iii) advise the municipality whether the project is capable of meeting the project performance standards.

(B) On the date one year after the initiation of operation of the project the municipality shall certify to the Commissioner whether the project is capable of meeting the project performance standards. If the project does not meet the project performance standards, the municipality shall submit the following:

(i) a corrective action report which includes an analysis of the cause of the project's inability to meet the performance standards (including infiltration/inflow reduction) and estimates of the nature, scope and cost of the corrective action necessary to bring the project into compliance. Such corrective action report shall be prepared at other than state expense;

(ii) the schedule for undertaking, in a timely manner, the corrective action necessary to bring the project into compliance; and

(iii) the scheduled date for certifying to the Commissioner that the project is capable of meeting the project performance standards.

(C) Corrective action necessary to bring a project into compliance with the project performance standards shall be undertaken by the municipality at other than state expense.

(D) Nothing in this section shall be construed to prohibit a municipality from requiring more assurances, guarantees, or indemnity or other contractual requirements from any party performing project work.

(11) Final Inspection. The municipality shall notify the Commissioner of the completion of project construction and the Commissioner shall cause final inspection to be made within 60 days of receipt of the notice. When final inspection is completed and the Commissioner determines that the treatment works have been satisfactorily constructed, in accordance with the funding assistance agreement, the municipality may make a request for final payment under subdivision (s) (5) of this section.

(q) **Financial Assistance Agreement Amendments.**

(1) Agreements may be amended for project changes in accordance with this subsection. No agreement may be amended to increase the amount of assistance unless the funds are available for obligation. A formal amendment shall be effected only by a written amendment to the agreement.

(2) For financial assistance awarded under Sections 22a-482-1 to 22a-482-4, an amendment to increase the amount may be made for:

(A) change orders, claims and arbitration settlements; or

(B) revised bid documents; or

(C) project changes required by the Commissioner; or

(D) increased costs on architectual/engineering agreements.

(r) **Enforcement.** If the Commissioner determines that the municipality has failed to comply with any provision of these regulations, he or she may impose any of the following:

(1) the grant portion of the financing may be withheld under subdivisions (t) (3) or (t) (4) of this section.

(2) grant project costs directly related to the noncompliance may be disallowed; or

(3) project work may be suspended; or

(4) a noncomplying municipality may be found nonresponsible or ineligible for future state assistance; or

(5) an injunction may be entered or other equitable relief afforded by a court of appropriate jurisdiction; or

(6) such other administrative or judicial action may be instituted as is legally available and appropriate.

(s) **Grant and Loan Payments.** The municipality shall be paid the allowable project costs incurred within the scope of an approved project and which are currently due and payable from the municipality (i.e. not including withheld or deferred amounts), up to the amount set forth in the agreement and any amendments thereto. Payments for engineering services shall be made in accordance with subsection (f) of this section and payments for construction contracts shall be made in accordance with subsections (m) and (n) of this section. All allowable costs incurred before initiation of construction of the project shall be claimed in the application for assistance for that project before the award of the assistance or no subsequent payment shall be made for the costs.

(1) Initial Request for Payment. Upon award of financial assistance, the municipality may request payment for the unpaid share of allowable project costs incurred before the award. Payment for such costs shall be made in accordance with the negotiated payment schedule included in the agreement.

(2) Interim Requests for Payment. The municipality may submit requests for payments for allowable costs in accordance with the negotiated payment schedule included in the agreement. Generally, payments shall be made within 13 days after receipt of a request for payment.

(3) Adjustment. At any time before final payment under the agreement, the Commissioner may cause any request(s) for payment to be reviewed or audited and make appropriate adjustment.

(4) Refunds, Rebates, Credits, etc. The state share of any refunds, rebates, credits or other amounts (including any interest) that accrue to or are received by the municipality for the project, and that are properly allocable to costs which the municipality has received funding assistance shall be credited to the current state allotment. Reasonable expenses incurred by the municipality for the purpose of securing such refunds, rebates, credits, or other amounts shall be allowable when approved by the Commissioner.

(5) Final Payment. After completion of final inspection under subdivision (p)(11) of this section, receipt and approval of the request for payment which the municipality designates as the ''final payment request,'' and the municipality is deemed in compliance with all applicable requirements of the funding agreement, the Commissioner shall pay to the municipality any balance of the share of allowable project costs which has not already been paid. The municipality must submit the final payment request within six (6) months of the scheduled completion.

(6) Assignment and Release. By its acceptance of final payment, the municipality agrees to assign to the state the state share of refunds, rebates, credits or other amounts, including any interest, properly allocable to costs for which the municipality has been paid by the state under the assistance agreement. The municipality thereby also releases and discharges the state, its officers, agents and employees from all liabilities, obligations, and claims arising out of the project work subject only to exceptions previously specified in writing between the Commissioner and the municipality.

(7) Audit Upon Completion of the Project. The municipality shall certify to the state that the project has been completed in accordance with the final plans and specifications approved by the Commissioner. The municipality shall within 90 days of such certification, prepare an audit of the project performed by an independent public accountant meeting the requirements of section 7-394a and 7-396a of the

Connecticut General Statutes. Such audit shall be performed in accordance with generally accepted accounting principles and shall identify any expenditures made by the municipality not in conformance with the agreement. The municipality further agrees that the auditors of Public Accounts of the state shall have access to all records and accounts of the municipality concerning the project. To provide such access the municipality agrees that it shall preserve all its records and accounts concerning the project for a period of 3 years after the date such audit is delivered to the state.

(t) **Administrative Changes.**

(1) Transfer of Agreements; Change of Name Agreements. Transfer of an agreement and change of name agreements require the prior written approval of the Commissioner. The municipality may not approve any transfer of an agreement without the concurrence of the Commissioner. The Commissioner shall prepare the necessary transfer documents upon receipt of appropriate information and documents submitted by the municipality.

(2) Suspension of Work (Stop Work Orders). Work on a project or on a portion or phase of a project for which funding assistance has been awarded may be ordered stopped by the Commissioner.

(A) Use of Stop-Work Orders. Work stoppage may be required for good cause such as default by the municipality, failure to comply with the terms and conditions of the funding agreement, realignment of programs, lack of adequate funding, or advancements in the state of the art. Inasmuch as stop-work orders may result in increased costs to the state by reason of standby costs, such orders will be issued only after a review by the Commissioner. Generally, use of a stop-work order shall be limited to those situations where it is advisable to suspend work on the project or a portion or phase of the project for important program or agency considerations and a supplemental agreement providing for such suspension is not feasible. Although a stop-work order may be used pending a decision to terminate by mutual agreement or for other cause, it shall not be used in lieu of the issuance of a termination notice after a decision to terminate has been made.

(B) Contents of stop-work orders should be discussed with the municipality and should be appropriately modified in light of such discussions. Stop-work orders should include a clear description of the work to be suspended, instructions as to the issuance of further orders by the municipality for materials or services, guidance as to action to be taken on subagreements, and other suggestions to the municipality for minimizing costs.

(C) Issuance of Stop-Work Order. After appropriate review of the proposed action has occurred, the Commissioner may, by written order to the municipality, require the municipality to stop all or any part of the project work for a period of not more than forty-five (45) days after the order is delivered to the municipality, and for any further period to which the parties may agree. The Commissioner shall prepare the necessary documents for the stop-work order. Any such order shall be specifically identified as a stop-work order issued pursuant to this subdivision.

(D) Effect of Stop-Work Order.

(i) Upon receipt of a stop-work order, the municipality shall forthwith comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within the suspension period or within any extension of that period to which the parties shall have agreed, the state shall either cancel the stop-work order, in full or in part, terminate the work covered by such order as provided in subdivision (t)(3) of this section or authorize resumption of work.

(ii) If a stop-work order is cancelled or the period of the order or any extension thereof expires, the municipality shall promptly resume the previously suspended work. An equitable adjustment shall be made in the grant period, the project period, the grant amount, the funding assistance amount, or all of these, and the funding assistance instrument shall be amended accordingly if the stop-work order results in an increase in the time required for, or an increase in the municipality's cost properly allocable to, the performance of any part of the project and the municipality asserts a written claim for such adjustment within sixty (60) days after the end of the period of work stoppage.

(iii) If a stop-work order is not cancelled and the grant-related project work covered by such order is within the scope of a subsequently-issued termination order, the reasonable cost resulting from the stop-work order shall be allowed in arriving at the termination settlement.

(iv) Costs incurred by the municipality, its contractors, subcontractors, or representatives, after a stop-work order is delivered, or within any extension of the stop-work period to which the parties shall have agreed, with respect to the project work suspended by such order or agreement which are not authorized by this section or specifically authorized in writing by the Commissioner, shall not be allowable costs.

(3) Termination of Funding Agreements. A funding agreement may be terminated in whole or in part by the Commissioner in circumstances where good cause can be demonstrated.

(A) Termination Agreement. The parties may enter into an agreement to terminate the funding agreement at any time pursuant to terms which are consistent with these regulations. The agreement shall establish the effective date of termination of the project, the basis for settlement of termination costs, the amount and date of payment of any sums due either party, and the schedule of repayment of all sums borrowed from the Clean Water Fund by the municipality. The Commissioner shall prepare the necessary termination documents.

(B) Project Termination by Municipality. A municipality may not unilaterally terminate the project work except for good cause. The municipality shall promptly give written notice to the Commissioner of any complete or partial termination of the project work by the municipality. If the Commissioner determines that there is good cause for the termination of all or any portion of a project, he or she may enter into a termination agreement or unilaterally terminate, effective with the date of cessation of the project work by the municipality. If the Commissioner determines that a municipality has ceased work on the project without good cause, he or she may unilaterally terminate or annual the agreement.

(C) Termination by Commissioner.

(i) Notice of Intent to Terminate. The Commissioner shall give not less than ten (10) days written notice to the municipality of intent to terminate a funding agreement in whole or in part.

(ii) Termination Action. The municipality shall be afforded an opportunity for consultation prior to any termination. After the Commissioner has been informed of any expressed views of the municipality and concurs in the proposed termination, the Commissioner may, in writing, terminate the agreement in whole or in part.

(iii) Basis for Termination. An agreement may be terminated by the Commissioner for good cause subject to negotiation and payment of appropriate termination settlement costs.

(D) Effect of Termination. Upon termination, the municipality shall refund or credit to the state any funds paid or owed to the municipality and allocable to the

terminated project work, except such portion thereof as may be required to meet commitments which had become firm prior to the effective date of termination and are otherwise allowable. The municipality shall not make any new commitment without state approval. The municipality shall reduce the amount of outstanding commitments insofar as possible and report to the Commissioner the uncommitted balance of funds awarded under the funding agreement.

(4) Annulment of Agreement.

The Commissioner may annul the funding agreement if he or she determines that there has been no substantial performance of the project work without good cause, there is convincing evidence the funding assistance was obtained by fraud, or there is convincing evidence of gross abuse or corrupt practices in the administration of the project. In addition to such remedies as may be available to the state under state or local law, all funds previously paid to the municipality shall be returned or credited to the state and no further payments shall be made to the municipality.

(5) Deviations. The Commissioner is authorized to approve deviations from requirements of Sections 22a-482-1 to 22a-482-4, when he or she determines that such deviations are essential to effect necessary actions or where special circumstances make such deviations in the best interest of the state.

(A) Request for Deviation. A request for a deviation shall be submitted in writing to the Commissioner as far in advance as the exigencies of the situation will permit. Each request for a deviation shall contain at a minimum:

(i) the name of the municipality, the project identification number, and the dollar value, if appropriate;

(ii) identification of the section of Sections 22a-482-1 to 22a-482-4 from which a deviation is sought;

(iii) an adequate description of the deviation and the circumstances in which it shall be used, including all appropriate justification for the deviation request; and

(iv) a statement as to whether the same or a similiar deviation has been requested previously and, if so, circumstances of the previous request.

(B) Approval of Deviation. Deviations may be approved only by the Commissioner. A copy of each such written approval shall be retained in the official state project file.

(Effective March 5, 1992)

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Annual Registration Renewal Fee for Manufacturers

Sec. 22a-630(d)-1. Annual registration renewal fee for manufacturers

(a) **Definitions.**

Terms used in this section shall have the meanings given to them in section 22a-638-1 of the Regulations of Connecticut State Agencies.

(b) **Annual Registration Renewal Fee.**

(1) Each year, the commissioner shall determine an annual registration renewal fee for each manufacturer. A manufacturer shall submit its annual registration renewal fee with the submission of its annual re-registration. The fee shall be effective for one year. The annual registration renewal fee for each manufacturer shall not be less than $250.00 and shall be based upon:

(A) the expected costs to the department for administering the program established pursuant to chapter 446n of the Connecticut General Statutes for the upcoming year; and

(B) each manufacturer's market share as determined pursuant to section 22a-638-1(g) to (i), inclusive, of the Regulations of Connecticut State Agencies and subsection (c) of this section.

(2) The annual registration renewal fee collected from all manufacturers shall cover, but not exceed, the expenses incurred by the department to administer the program established pursuant to chapter 446n of the Connecticut General Statues.

(c) **Annual Budget.** Each year the commissioner shall develop an annual budget for administering the program established pursuant to chapter 446n of the Connecticut General Statutes, including, but not limited to, the cost of any program development, licensing, inspections, enforcement and education and outreach to carry out such program. The budget shall indicate categories of projected costs for administering the program and provide the total projected budget for each category. The commissioner shall post the budget on the department's website and shall provide the budget to the manufacturers.

(d) **Calculation of Annual Registration Renewal Fee.**

(1) To determine a manufacturer's annual registration renewal fee, the commissioner shall determine the approximate number of all computers, monitors, televisions and printers sold for the previous year. To the extent feasible, the number of units sold shall be based upon nationally available data, including but not limited to, the number of units shipped, retail sales data, consumer surveys or other nationally available market share data. The commissioner shall divide the approximate number of units sold for each type of CED by the approximate total of all CEDs sold. This will yield a percentage of the total of all CEDs sold that is attributable to each type of CED. The total amount of the department's budget for administrative expenses for the upcoming year shall be apportioned to each type of CED such that the budget for each type of CED shall correspond to the percentage of the total units sold that is attributable to each type of CED. If monitors represent twenty-five (25%) per cent of the total of all CEDs sold, then twenty-five (25%) per cent of the department's budget shall be allocated to the manufacturers of monitors. The portion of the department's budget allocated to each type of CED shall then be allocated among the manufacturers based upon their market share as provided for in section 22a-638-1(g) to (i), inclusive, of the Regulations of Connecticut State Agencies.

(2) Notwithstanding the foregoing, regardless of the market share determination made by the commissioner, no manufacturer shall pay less than $250.00 per year for its annual registration renewal fee.

(e) **Notification of Annual Registration Renewal Fee.** At least thirty (30) days before the date that an annual registration renewal shall be submitted, the commissioner shall provide a manufacturer, in writing, at the address provided on the manufacturer's registration or a more recent address provided to the commissioner by a manufacturer, the manufacturer's annual registration renewal fee. Where applicable, the notice shall state the amount owed for each type of CED.

(f) **Late Fee.** A manufacturer who pays its annual registration renewal fee after the date it is due shall pay an additional fee of ten (10%) per cent of such annual registration renewal fee, plus one and one quarter (1° %) per cent per month or part thereof that the annual registration renewal fee was late. This subsection shall not prevent the commissioner from pursuing other remedies available by law.

(g) **Method of Payment.** Unless payment by another means is approved by the commissioner, the annual registration renewal fee shall be paid by certified check or money order made payable to ''Department of Environmental Protection''.

(h) **Failure to Pay.** A manufacturer that does not pay its annual registration renewal fee, or any late fee, shall not be in compliance with the provisions of chapter 446n of the Connecticut General Statutes and this section. Such a manufacturer shall:

(1) not be included in the list of compliant manufacturers posted on the department's website pursuant to section 22a-634(a) of the Connecticut General Statutes; and

(2) be subject to all of the consequences of being in non-compliance, including, but not limited to, any action provided for by law.

(Adopted effective June 1, 2010)

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Standards for the recycling of covered electronic devices 22a-638-1

Recycling of Covered Electronic Devices

Sec. 22a-638-1. Standards for the recycling of covered electronic devices

(a) **Definitions.** As used in this section and section 22a-630(d)-1 of the Regulations of Connecticut State Agencies:

(1) ''Cathode ray tube'' or ''CRT'' means cathode ray tube as defined in section 22a-629 of the Connecticut General Statutes;

(2) ''Commissioner'' means the Commissioner of Energy and Environmental Protection or the Commissioner's designee;

(3) ''Computer'' means an electronic, magnetic, optical, electrochemical or other high-speed data processing device performing logical, arithmetic or storage functions and includes, but is not limited to, a central processing unit or both a computer central processing unit and a monitor, such as a notebook, laptop or portable device. Computer does not include an automated typewriter or typesetter, a portable handheld calculator, a portable digital assistant or other similar device;

(4) ''Consumer'' means a person from a household.

(5) ''Covered electronic device'' or ''CED'' means a desktop or personal computer, computer monitor, portable computer, printer, CRT-based television and non-CRT-based television sold to consumers, but does not include any of the following, including any component of the following:

(A) an electronic device that is a part of a motor vehicle or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchise dealer, including replacement parts for use in a motor vehicle;

(B) an electronic device that is functionally or physically a part of a larger piece of equipment designed and intended for use in an industrial, commercial or medical setting, including diagnostic, monitoring or control equipment;

(C) an electronic device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier or air purifier;

(D) a telephone of any type unless it contains a video display area greater than four inches measured diagonally; or

(E) any handheld device used to access commercial mobile radio service, as such service is defined in 47 CFR 20.3;

(6) ''Covered electronic recycler or CER'' means covered electronic recycler as defined in section 22a-629 of the Connecticut General Statutes;

(7) ''Department'' means the Department of Energy and Environmental Protection;

(8) ''Disposal facility'' means a facility receiving waste or residue, generated from the recycling of CEDs or their components, for disposal when such waste or residue cannot be recycled any further. A disposal facility includes, but is not limited to, an incinerator or a facility where waste or residue is placed on the land or water;

(9) ''Household'' means a person, or group of people, living in a single detached dwelling, a residential condominium or a single unit of a multiple unit dwelling, who, pursuant to chapter 446n of the Connecticut General Statutes and this section, provides seven or fewer CEDs at one time for reuse, refurbishment or recycling;

(10) ''Manufacturer'' means Manufacturer as defined in section 22a-629 of the Connecticut General Statutes;

(11) ''Manufacturer's brands'' means manufacturer's brands as defined in section 22a-629 of the Connecticut General Statutes;

(12) ''Market share'' means market share as defined in section 22a-629 of the Connecticut General Statutes;

(13) ''Materials of concern'' means CEDs or components of CEDs that contain or consist of any of the following:

(A) circuit boards, including, but not limited to, whole or shredded circuit boards;

(B) whole CRTs;

(C) glass from CRTs, except for glass that has been sorted, washed, and culletized and that is destined for use in manufacturing new CRTs or in any other product clearly identified in a CER's application that has been approved by the commissioner;

(D) batteries;

(E) any mercury-containing material; or

(F) any material containing polychlorinated biphenyls (PCBs), including, but not limited to, capacitors and ballasts;

(14) ''Mercury-containing material'' means a component of a CED or a part of a component of a CED, including, but not limited to, a switch, relay, backlighting or lamp, that contains elemental mercury integral to its function. Mercury-containing material includes phosphor powder prior to or during the retort process;

(15) ''Monitor'' means monitor as defined in section 22a-629 of the Connecticut General Statutes;

(16) ''Operator'' means the person responsible for the overall operation of a recycling or disposal facility;

(17) ''Orphan device'' means orphan device as defined in section 22a-629 of the Connecticut General Statutes;

(18) ''Owner'' means the person who owns a recycling or disposal facility or part of any such facility;

(19) ''Person'' means person as defined in section 22a-629 of the Connecticut General Statutes;

(20) ''Portable computer'' means portable computer as defined in section 22a-629 of the Connecticut General Statutes;

(21) ''Printer'' means a device that prints text or illustrations on paper and includes, but is not limited to, daisy-wheel, dot-matrix, ink-jet, laser, LCD and LED, line printers or thermal printers, including a device that performs other functions in addition to printing. Printer does not include a device used solely to copy documents, to scan documents or to send documents by facsimile;

(22) ''Recycling'' or ''Recycle'' means any process by which a CED or component of a CED that would otherwise become solid waste or hazardous waste is collected, separated and processed to be returned to use in the form of raw materials or products, in accordance with environmental standards established by the department. Recycling includes, but is not limited to, storing or collecting CEDs or components of CEDs for recycling, and dismantling or shredding CEDs or components of CEDs;

(23) ''Recycling facility'' means a place or location, including all land and structures or appurtenances, used to collect, store, separate or process CEDs or components of CEDs into raw materials or products. Recycling facility includes, but is not limited to, land and structures or appurtenances used for the disassembly and physical recovery of CEDs, or components of CEDs, including, but not limited to, crushing, shredding, grinding, glass-to-glass recycling or other operations. A recycling facility does not include:

(A) the initial location used to collect CEDs from residents, provided no other activities described in this definition that would otherwise make such facility a recycling facility are conducted; or

(B) a facility where, for no more than ten days, activities incidental to the transportation of CEDs or components of CEDs are conducted, including, but not limited to:

(i) storing pre-packaged CEDs or components of CEDs;

(ii) transferring pre-packaged CEDs or components of CEDs from one mode of transportation to another; or,

(iii) aggregating pre-packaged CEDs or components of CEDs;

(24) ''Refurbishment'' means, with respect to a CED that functions for its original intended purpose, installing a new electrical cord, making aesthetic improvements only, such as polishing or removing scratches, or upgrading a CED by replacing an operating system or other software, memory or component of a CED, such as a video card, sound card, disc drive or hard drive, that is working, with an upgraded system or software, memory or component of a CED. Other than the installation of a new electrical cord, upgrading a CED does not mean or include the repair of a non-functioning CED, including, but not limited to, repairing or replacing a non-functioning operating system or software, memory or component of a CED, with a functioning one;

(25) ''Responsible official'' means:

(A) for an individual(s) or sole proprietorship, the individual(s) or proprietor, respectively;

(B) for a corporation, any director or officer empowered by the Board of Directors pursuant to the corporation's Certificate of Incorporation and any bylaws;

(C) for a limited liability company (LLC), a manager, if the LLC's Articles of Incorporation vest management of the LLC in one or more managers, otherwise, any member of the LLC;

(D) for a partnership, any partner, subject to the provisions of a statement of partnership authority; and

(E) for a municipal, state or federal agency or department, either a principal executive officer, a ranking elected official or other representative authorized by law.

(26) ''Retailer'' means retailer as defined in section 22a-629 of the Connecticut General Statutes;

(27) ''Reuse'' means continuing to use a CED, as is, without modification, for its original intended purpose;

(28) ''Sell'' or ''sale'' means sell or sale as defined in section 22a-629 of the Connecticut General Statutes;

(29) ''Television'' means a stand-alone display system containing a CRT or any other type of display primarily intended to receive video programming via broadcast transmitted over the air or by cable, satellite or other means, having a viewable area greater than four inches when measured diagonally, able to adhere to standard consumer video formats such as PAL, SECAM, NTSC, ATSC and HDTV and having the capability of selecting different broadcast channels and support sound capability. Television includes a television with a built in VCR, DVD or other player;

(30) ''Total weight'' means weight expressed in pounds; and

(31) ''Video display'' means video display as defined in section 22a-629 of the Connecticut General Statutes.

(b) **Licensing of Covered Electronic Recyclers.** (1) In implementing the provisions of chapter 446n of the Connecticut General Statutes and this section, the commissioner may approve of a person who applies to the department to become a CER pursuant to the requirements of this subsection.

(A) A CER shall perform or arrange for:

(i) the transportation and complete recycling of CEDs, including the disposal of waste or residue from recycling activities, or the transportation and reuse or refurbishment of CEDs; and

(ii) the return of CEDs to a manufacturer pursuant to subsection (q) of this section.

(B) (i) a person who performs, or arranges for, only part of the activities necessary to transport and completely recycle CEDs, or only part of the activities necessary to transport and reuse or refurbish CEDs, cannot be approved as a CER.

(ii) A person who cannot provide for the return of CEDs to a manufacturer pursuant to subsection (q) of this section cannot be approved as a CER.

(C) A person shall be approved as a CER by the commissioner to be eligible to receive payment from manufacturers when implementing the provisions of chapter 446n of the Connecticut General Statutes and this section. A person that is not approved by the commissioner as a CER, or whose application has been denied by the commissioner, shall not be eligible for reimbursement by a manufacturer pursuant to chapter 446n of the Connecticut General Statutes and this section.

(2) (A) To apply to become a CER a person shall submit to the commissioner a complete application on a form prescribed by the commissioner. Applications, including renewal applications, will only be accepted for a sixty (60) day period specified by the commissioner each year. For renewal applications, such period shall be at least sixty (60) days before the expiration of an approval issued to a CER under this section. The commissioner shall provide notice of the commencement of the sixty (60) day period to submit applications at least thirty (30) days before the sixty (60) day period begins. The commissioner may provide such notice through a posting on the department's website, advertising in trade publications, sending notice to trade associations and the most recent list of approved CERs, or any other method intended to provide notice. The commissioner shall provide notice, by mail or by e-mail, directly to anyone who requests that such direct notice be provided. No application will be reviewed if it is submitted before or after the sixty (60) day period designated by the commissioner for the receipt of applications.

(B) Nothing in this subdivision shall prevent the commissioner from requesting, or an applicant from submitting, supplemental information regarding an application that was submitted within the sixty (60) day period for receipt of applications, except at no time shall the commissioner solicit or seek from, or recommend to, an applicant or any other person, a revision or modification to the fee proposed by an applicant pursuant to subdivisions (3)(H) and (I) and subdivision (5)(B) of this subsection. In addition, the commissioner shall not indicate or inform an applicant or any other person, at any time, that a particular fee be proposed pursuant to subdivisions (3)(H) and (I) and subdivision (5)(B) of this subsection, or that a revision or modification to any such fee proposed in an application submitted pursuant to this subdivision or subdivision (11) of this subsection, will increase, decrease or alter, in any way, the likelihood that such application will be approved or disapproved.

(3) An application for a CER shall, at a minimum, include:

(A) the applicant's name, address, contact information, e-mail address and any similar information, including any such information for any person or entity noted in this subdivision. If the applicant is:

(i) a corporation, the application shall include, at a minimum, the state of incorporation, and the names of the principals, including the president and all directors;

(ii) a limited liability company, the application shall include, at a minimum, the state of registration and the names of the managing members of the company;

(iii) a limited partnership, the application shall include, at a minimum, the name of each general and limited partner;

(iv) a general partnership, the application shall include, at a minimum, the name of each general partner; or

(v) not an entity listed in clauses (i) to (iv) of this subparagraph, the application shall include, at a minimum, the name of the person or persons who will be responsible for compliance with the requirements of chapter 446n of the Connecticut General Statutes and this section;

(B) a description of the applicant's qualifications and experience for the past five (5) years in managing and recycling electronic waste, specifically including CEDs. This description shall include, but need not be limited to, a list and description of current and previous projects or contracts, the dollar value of such projects or contracts, including the price per pound, if ascertainable, charged by the applicant for recycling or other services for any existing project or contract and references regarding the management and recycling of CEDs;

(C) a detailed description of how the activities performed pursuant to this section will be undertaken in compliance with chapter 446n of the Connecticut General Statutes and this section;

(D) a detailed description of the process flow for the activities that will be performed pursuant to chapter 446n of the Connecticut General Statutes and this section, regarding the recycling of CEDs and components of CEDs. This description:

(i) shall include the processes and methods that will be used to recycle CEDs and components of CEDs, including a description of disassembly and physical recovery operations such as crushing, shredding, grinding, glass-to-glass recycling or other operations that will be used; and

(ii) shall include and begin from the point of initial collection from consumers until CEDs or components of CEDs are processed into raw materials or products and residue from recycling CEDs or components of CEDs is disposed of. This description shall include each recycling facility and each disposal facility used to recycle or dispose of CEDs or components of CEDs:

(E) information, pursuant to section 22a-6m of the Connecticut General Statutes, concerning the applicant's compliance with the environmental protection laws of Connecticut, all other states, the federal government and in addition, the environmental protection laws of any other country. This shall include information regarding the applicant and all transporters noted in response to subparagraph (M) of this subdivision and all facilities noted in response to subparagraph (G) of this subdivision recycling or disposing of materials of concern;

(F) the procedures that an applicant will use to:

(i) ensure that a CED came from a household in Connecticut;

(ii) separate CEDs for which a CER can obtain reimbursement from a manufacturer, pursuant to chapter 446n of the Connecticut General Statutes and this section, from other electronic devices for which a CER cannot obtain reimbursement from a manufacturer, including computers, monitors, televisions and printers from non-Connecticut residents or non-household sources;

(iii) identify the brand owner of a CED, excluding televisions;

(iv) record and maintain data required to properly bill manufacturers in accordance with subsection (j) of this section; and

(v) separate and return CEDs to a manufacturer, or to a facility designated by a manufacturer, pursuant to subsection (q) of this section;

(G) a disclosure of all facilities that will be used to comply with the requirements of chapter 446n of the Connecticut General Statutes and this section. This shall include, but not be limited to, all facilities used to recycle CEDs or components of CEDs, and dispose of waste or residue generated from the recycling of CEDs or components of CEDs. If multiple facilities are disclosed for the same activity, describe fully the circumstances under which each facility will be used. For each facility disclosed provide, as applicable:

(i) a description of the storage, dismantling and processing capacity of each facility;

(ii) a description of environmentally preferable practices, if any, (such as building standards or operation and management practices, including energy efficiency practices or a certification by others, e.g., LEED certification, ISO 14001 certification, energy efficiency practices) that will be used in implementing chapter 446n of the Connecticut General Statutes and this section;

(iii) the following information only for each recycling facility that recycles materials of concern and each disposal facility that disposes of materials of concern:

(I) a list of all applicable permits, licenses or approvals, if any, issued by a municipality, state, the federal government or any other country, that are required and that have been or will be obtained to authorize activities undertaken pursuant to chapter 446n of the Connecticut General Statutes and this section; and

(II) a list of the plans in effect at the facility to ensure worker safety, emergency preparedness and prevention, including but not limited to, a contingency plan and emergency procedures, if required by the applicable hazardous waste regulations, emergency response plans, and environmental, health and safety plans; and

(iv) a certification signed by the applicant affirming that:

(I) based upon reasonable investigation, that every facility for which information is being provided under subparagraph (G)(iii) of this subdivision has obtained or will obtain all permits, licenses or approvals needed to authorize activities undertaken pursuant to chapter 446n of the Connecticut General Statutes and this section; and

(II) the applicant has provided the owner or operator of each facility, for which information is being provided under subparagraph (G)(iii) of this subdivision, with a copy of the standards established in subsections (c) to (e), inclusive of this section.

(v) for each recycling facility and each disposal facility subject to the requirements of subparagraph (e)(6)(A) of this section, evidence that each facility has the insurance required by subdivision (e)(6) of this section; and

(vi) for each recycling facility and each disposal facility subject to the requirements of subparagraph (e)(7)(A) of this section, evidence that each facility has the financial assurance or other guarantee, as may be required by subdivision (e)(7) of this section.

(H) the fee, expressed as a price per pound, that the applicant proposes to charge manufacturers for the total cost of transporting and recycling CEDs. The fee may include a reasonable rate of profit or return on investment and costs associated with the following, collectively known as qualified reimbursable costs, provided that any such qualified reimbursable cost is incurred to implement chapter 446n of the Connecticut General Statutes or this section:

(i) providing a storage container;

(ii) loading and unloading CEDs, not including services provided by municipal personnel;

(iii) packaging and labeling CEDs for transport;

(iv) transporting CEDs;

(v) materials, labor, equipment and transportation costs associated with one-day collection events;

(vi) tracking and accounting for CEDs and, for computers, monitors and printers, tracking and accounting by brand and manufacturer;

(vii) recycling CEDs for recovery of useable materials, including, but not limited to, storage of CEDs prior to recycling;

(viii) disposal of the waste or residue from the recycling of CEDs;

(ix) the collection of information required by this section;

(x) billing, recordkeeping and reporting required by this section; and

(xi) general administrative costs, including, but not limited to, billing preparation, telephone and mailing charges;

(I) the fee, expressed as a price per pound, that the applicant proposes to charge if CEDs are returned to a manufacturer, or a facility designated by a manufacturer, pursuant to subsection (q) of this section. The fee may include a reasonable rate of profit or return on investment and costs associated with the following, collectively known as qualified reimbursable costs, provided that any such qualified reimbursable cost is incurred to implement chapter 446n of the Connecticut General Statutes or this section:

(i) providing a storage container;

(ii) loading and unloading CEDs, not including services provided by municipal personnel;

(iii) packaging and labeling CEDs for transport;

(iv) transporting CEDs to a storage facility;

(v) materials, labor, equipment and transportation costs associated with one-day collection events;

(vi) tracking and accounting for CEDs, and for computers, monitors and printers, tracking and accounting by brand and manufacturer;

(vii) storage of CEDs prior to physical transfer to a transporter who will transport the CEDs for or on behalf of a manufacturer, at the manufacturer's expense;

(vii) the collection of information required by this section;

(viii) billing, recordkeeping and reporting required by this section; and

(ix) general administrative costs, including but not limited to, billing preparation, telephone, and mailing charges;

(J) to the extent that the fees proposed by the applicant in subparagraphs (H) and (I) of this subdivision are greater than the fees charged or received by the applicant for equivalent or similar services in any existing contract or agreement to which the applicant is a party, a detailed explanation of the reasons for any such difference;

(K) for CEDs to be reused or refurbished, a description of how CEDs will be reused or refurbished and how the applicant will comply with the requirements of this section. This includes, but is not limited to, information concerning procedures for pre-screening CEDs, erasure or destruction of data, labeling, packaging, storing and transporting CEDs, ensuring that CEDs meet legitimate reuse and refurbishment specifications and the disposition of off-specification CEDs or CEDs that may break in transit;

(L) for CEDs or components of CEDs to be exported, a description of how the applicant will comply with the requirements of this section, including, but not limited to, whether and how CEDs will be reused or refurbished or how CEDs or components of CEDs will be recycled once exported, a disclosure of all of the countries to which CEDs or components of CEDs are to be exported, the countries through which CEDs or components of CEDs will travel, the import and export requirements for

all such countries, and the disposition of CEDs or components of CEDs that are off-specification, that may break in transit or that are not reused, refurbished or recycled for other reasons;

(M) a disclosure of each transporter used to transport CEDs from the initial site used to collect CEDs from consumers to the initial recycling facility, where CEDs are first dismantled, crushed, shredded or processed in a similar manner. For each such transporter provide:

(i) a description of the transportation and storage capacity for such transporter;

(ii) a list of all applicable permits, licenses or approvals, if any, issued by a state, the federal government or any other country, that are required and that have been or will be obtained to authorize activities undertaken pursuant to chapter 446n of the Connecticut General Statutes and this section; and

(iii) a description of environmentally preferable practices, if any, (such as alternative fuels, fleet operations or energy efficiency practices) that will be used in implementing chapter 446n of the Connecticut General Statutes and this section;

(N) any other information deemed necessary by the commissioner; and

(O) a $250.00 initial application fee.

(4) An applicant shall submit to the commissioner all documents required by subdivision (3) of this subsection in a complete and approvable form. If the commissioner notifies the applicant that any document or submittal is deficient or incomplete, the applicant shall correct the deficiencies and resubmit it within the time specified by the commissioner or, if no time is specified, not later than thirty (30) days after receipt of the commissioner's notice of deficiency or incompleteness. Incompleteness or deficiency shall be a reason for the commissioner to deny an application.

(5) (A) The commissioner shall approve or deny an application and shall notify the applicant, in writing, of the commissioner's decision. For purposes of clauses (i) to (vii), inclusive, and clause (ix) of this subparagraph only, the term applicant shall mean not only the applicant, but shall also include all other persons that the applicant is proposing to use to implement chapter 446n of the Connecticut General Statutes and this section. In deciding whether or not to approve an application, the commissioner shall consider the criteria set forth in clauses (i) to (ix), inclusive, of this subparagraph, based upon the information provided by each applicant and any other information obtained by the commissioner regarding an applicant relating to the requirements of chapter 446n of the Connecticut General Statutes and this section. In deciding whether or not to approve an application, the commissioner shall consider:

(i) whether the application is sufficient and complete, including payment of the required fee, and whether the application provides all of the information required by subdivision (3) of this subsection and clearly and completely describes how CEDs will be reused or recycled;

(ii) whether the qualifications and experience of the applicant demonstrate an ability to transport, manage and recycle or reuse CEDs;

(iii) whether the activities an applicant is proposing to undertake comply with the requirements of chapter 446n of the Connecticut General Statutes and this section;

(iv) whether the compliance history of an applicant demonstrates either an unwillingness or an inability to comply with applicable environmental requirements;

(v) whether the procedures an applicant is proposing to utilize to manage CEDs will be able to effectively perform the tasks specified in subdivision (3)(F) of this subsection;

(vi) whether the transporters and facilities that the applicant is proposing to use to implement chapter 446n of the Connecticut General Statutes and this section, comply with the requirements of chapter 446n of the Connecticut General Statutes, this section and any other applicable requirements;

(vii) whether the transporters and facilities that the applicant is proposing to use to implement chapter 446n of the Connecticut General Statutes and this section use practices, that the commissioner may determine are environmentally preferable, which shall be given a preference in the consideration of whether or not to approve a CER;

(viii) the fees proposed by an applicant, including the following, any of which may provide a basis for denying an application:

(I) whether the fee proposed under subdivision (3)(H) of this subsection exceeds one population standard deviation above the mean, as determined by the commissioner, for the applications under consideration by the commissioner;

(II) whether the proposed fee under subdivision (3)(I) of this subsection exceeds one and one half times the population standard deviation above the mean, as determined by the commissioner, for the applications under consideration by the commissioner;

(III) whether the proposed fees exceed the prevailing rates charged in the industry as determined by the commissioner; or

(IV) whether the proposed fees exceed those charged for equivalent or similar services in any existing contract or agreement to which the applicant is a party, and if so, the sufficiency of any reason for such difference; and

(ix) any other factor deemed significant by the commissioner regarding an applicant relating to the requirements of chapter 446n of the Connecticut General Statutes and this section.

(B) The commissioner may issue an approval for up to, but no more than, three (3) years, provided that if an approval is issued for more than one year:

(i) a CER shall submit, in writing, for the commissioner's review and approval, proposed fees as specified in subdivisions (3)(H) and (3)(I) of this subsection. The proposed fees shall be submitted during the sixty (60) day time period for acceptance of applications, including renewals applications, specified by the commissioner pursuant to subdivision (2) of this subsection;

(ii) fees proposed by a CER pursuant to clause (i) of this subparagraph shall be evaluated and may be denied by the commissioner based upon the criteria specified in subparagraph (A)(viii) of this subdivision;

(iii) the previous fees charged by the CER shall remain in effect until the commissioner approves new fees pursuant to this subparagraph; and

(iv) failure to make a timely submission of proposed fees required by this subparagraph, or the denial of the fees proposed by a CER pursuant to this subparagraph, may be grounds for the revocation of a CER's approval.

(6) Any approval issued to a CER by the commissioner may contain any conditions the commissioner deems necessary to ensure compliance with chapter 446n of the General Statutes and this section or to protect human health or the environment. If an application is denied, the commissioner shall indicate, in writing, the reasons for any such denial.

(7) (A) Provided the requirements of subdivisions (8) and (9) of this subsection do not apply, whenever any information in a CER's most recent application submitted to the commissioner pursuant to subdivision (3) of this subsection, is inaccurate or misleading, or any relevant information was omitted, a CER shall submit corrected

or omitted information, in writing, on a form prescribed by the commissioner, not later than thirty (30) days after the information is no longer accurate or the CER knows or should have known that relevant information was omitted. This requirement shall remain in effect at all times, including after the commissioner issues a CER an approval.

(B) In addition to actions taken under subdivision (12) of this subsection, the commissioner may revoke, suspend or modify an approval based upon any information obtained under this subdivision. The commissioner may, at anytime, request updated information from a CER.

(8) (A) Except as provided for in this subdivision (9) of this subsection, with respect to chapter 446n of the Connecticut General Statutes and this section, a CER approved by the commissioner shall not engage in or utilize any activity, facility or procedure not described or contained in such CER's application approved by the commissioner or approved by the commissioner pursuant to this subdivision.

(B) A CER shall request that the commissioner approve any modification to any information, activity, facility or procedure described or contained in such CER's application in response to subdivision (3)(C), (3)(K) or (3)(L) of this subsection, to any facility listed in response to subdivisions (3)(G) of this subsection which application has been approved by the commissioner, or to any change previously approved by the commissioner pursuant to this subdivision. This requirement shall apply while any approval issued to a CER remains in effect. Any request for a modification pursuant to this subparagraph shall be in writing, on a form prescribed by the commissioner and shall contain the information specified in subdivision (3)(C), (3)(G), (3)(K) or (3)(L), as applicable, depending upon the modification requested by the CER. The provisions of subdivisions (4) and (5) of this subsection shall apply to any such request for a modification. A CER shall not be eligible to receive reimbursement, pursuant to chapter 446n of the Connecticut General Statutes and this section, for costs incurred regarding an activity, facility or procedure that is not in described or contained in its application or approved by the commissioner pursuant to this subparagraph.

(C) Except as provided for in subdivision (5)(B) of this subsection, the fees approved by the commissioner for the activities specified in subdivisions (3)(H) and (3)(I) of this subsection shall not be modified during the term of any approval issued to a CER. If the commissioner issues an approval for more than one year, the fees for the activities specified in subdivisions (3)(H) and (3)(I) of this subsection may be modified only as provided for in subdivision (5)(B) of this subsection.

(9) A CER approved by the commissioner, shall notify the commissioner of any modification to any information, activity, facility or procedure described or contained in the CER's application in response to subdivision (3)(A), (3)(E) or (3)(F) of this subsection, or a change to any transporter listed in response to subdivision (3)(M) of this subsection which application has been approved by the commissioner, or to any change for which notice has been previously provided to the commissioner pursuant to this subdivision. This requirement shall apply while any approval issued to a CER remains in effect. Any notification of a modification pursuant to this subdivision shall be in writing, on a form prescribed by the commissioner and shall contain the information specified in subdivision (3)(A), (3)(E), (3)(F) or (3)(M), as applicable, depending upon the modification for which a CER is providing notice. Any such notice shall be provided as soon as practicable before or after any such modification, but not later than thirty (30) days after such modification has been made.

(10) A CER may seek to modify any condition in an approval issued by the commissioner. Any such request shall be in writing and shall state the provision for which a modification is requested and the reason for the requested modification. The commissioner shall grant or deny any such request, in writing.

(11) (A) A CER may apply for renewal of its approval by the commissioner and shall do so in the manner prescribed in subdivision (2) of this subsection, using a form prescribed by the commissioner. Unless the form prescribed by the commissioner provides otherwise, a CER shall provide the information prescribed in subdivision (3) of this subsection. The commissioner may require the submission of additional information to determine whether or not to renew the approval for a CER.

(B) Notwithstanding any previous approvals, the commissioner may deny an application for renewal from a previously approved CER. In considering whether to approve or deny a CER's renewal application the commissioner shall consider the information and factors specified in subdivision (5) of this subsection, the CER's performance in implementing chapter 446n of the Connecticut General Statutes and this section and any other information obtained by the commissioner.

(C) A CER's current approval shall remain in effect until the commissioner makes a final determination regarding such CER's renewal application, provided that the CER has submitted the renewal application in a timely manner and the information provided in the renewal application is complete.

(D) There shall be no fee for submitting a renewal application.

(12) In addition to any other reason provided for by law, including, but not limited to, subdivision (5)(B)(iv) of this subsection, the commissioner may revoke, suspend or modify a CER's approval for any of the following reasons:

(A) the commissioner determines that a CER is unwilling or unable to comply with the requirements of chapter 446n of the Connecticut General Statutes or this section;

(B) the CER has failed to disclose all relevant and material facts in its application during any department proceeding associated with the application, or when required by chapter 446n of the Connecticut General Statutes or this section;

(C) for violations of the environmental protection laws of Connecticut, any other state, the federal government, or any other country, by a CER or any person a CER lists in subdivision (3)(G) or (3)(M) of this subsection regarding the implementation of chapter 446n of the Connecticut General Statutes or this section; or

(D) the activities engaged in, or arranged for, by a CER, or any of the persons a CER lists in subdivision (3)(G) or (3)(M) of this subsection, regarding the implementation of chapter 446n of the Connecticut General Statutes or this section, are causing, or are reasonably likely to cause pollution, or are endangering, or may endanger, human health, safety, welfare or the environment.

(13) (A) No person shall act or purport to act under the authority of an approval issued to another CER. An approval issued to a CER may be transferred, provided, that before any transfer occurs, the transfer has been approved, in writing, by the commissioner.

(B) A request to transfer an approval shall be made on a form prescribed by the commissioner. The commissioner may require the submission of additional information to determine whether or not to transfer an approval.

(C) In considering a request to transfer an approval, the commissioner may consider any matter that the commissioner would consider when deciding whether or not to approve an application submitted by a CER, and shall consider whether the proposed transferee is able to comply with any terms and conditions of the approval.

(D) When transferring an approval issued to a CER, the commissioner may include any conditions the commissioner deems necessary to ensure compliance with chapter 446n of the General Statutes and this section or to protect human health or the environment.

(14) The commissioner shall post and maintain a list of the currently approved CERs on the department's website and shall provide any person with such list upon request.

(c) **General Standards for the Reuse, Refurbishment and Recycling of CEDs and the Disposal of Waste or Residue Generated from the Recycling of CEDs.** A CER shall comply with the requirements of this subsection regarding the reuse, refurbishment or recycling of CEDs and the disposal of waste or residue generated from the recycling of CEDs.

(1) Hierarchy of Management Strategies. A CER shall ensure that reuse, refurbishment and recycling techniques are used to the fullest extent practicable, taking into account technical and economic feasibility, in an effort to minimize disposal of CEDs and their components. A CER shall maintain records to demonstrate its efforts to minimize the disposal of CEDs and their components, including all attempts made to reuse, refurbish or recycle such CEDs and their components.

(2) Separation of CEDs. A CER shall ensure that from the initial collection of a CED by a municipality or other person, until it is weighed and inventoried for billing purposes, there is a system in place to identify, track and differentiate CEDs from all other computers, monitors, printers and televisions from households outside Connecticut or from non-household sources. A CER shall maintain written procedures regarding such identification, tracking and differentiation and shall make such procedures available to the commissioner, or to a registered manufacturer, upon request.

(3) Record of Computers, Monitors and Printers and Verification of Manufacturers. For each computer, monitor and printer collected pursuant to this section, a CER shall maintain written documentation that identifies, for each calendar month, the manufacturer's name, the brand and weight of each computer, monitor and printer received, and whether at receipt, the computer, monitor or printer was identified as having been generated by a household in Connecticut. A CER shall also determine the total weight of each type of CED (meaning the total weight of computers, of monitors and of printers, each figured separately) returned to a manufacturer or a facility designated by a manufacturer pursuant to subsection (q) of this section and shall maintain written documentation of the total weight of each type of CED. If a CER receives a computer, monitor or printer that is labeled with a manufacturer's brand and that manufacturer is not on the list of registered manufacturers or the list of manufacturers of orphan devices maintained by the commissioner and posted on the department's website, the CER shall notify the commissioner, in writing, not later than ten (10) days after the receipt of any such computer, monitor or printer. The notification shall include the manufacturer and brand of any such computer, monitor or printer, if known.

(4) Record of Televisions and Verification of Manufacturers. A CER shall maintain written documentation of the total weight and number of televisions received each calendar month, and identified at receipt, as generated by a household in Connecticut. A CER shall also determine the total weight of all televisions returned to a manufacturer or a facility designated by a manufacturer pursuant to subsection (q) of this section and shall maintain written documentation of the total weight of all such televisions. If a CER receives a television that is labeled with a manufactur-

er's brand and that manufacturer is not on the list of registered manufacturers maintained by the commissioner and posted on the department's website or on the list, if one is maintained and posted on the department's website, of television brands for which no manufacturer can be identified or for which the manufacturer is no longer in business, the CER shall notify the commissioner, in writing, not later than ten (10) days after the receipt of any such television. The notification shall include the manufacturer and brand of any such television, if known.

(5) Compliance with Applicable Requirements. A CER shall ensure that each transporter and the owner or operator of each recycling facility and each disposal facility, used to implement the requirements of chapter 446n of the Connecticut General Statutes and this section, possesses any license, permit, authorization or approval required by any governmental entity and remains in compliance with such license, permit authorization or approval and all applicable federal, state and local requirements pertaining to:

(A) the transportation, storage, processing, handling, management and recycling of CEDs and their components; and

(B) the disposal of waste or residue generated from the recycling of CEDs and their components.

A CER may comply with the requirements of this subdivision through various means, including, but not limited to, contractual arrangements, audits, or certifications statements.

(6) Exports.

(A) With respect to any CED collected pursuant to chapter 446n of the Connecticut General Statutes and this section, a CER shall ensure that any person exporting CEDs or components of CEDs pursuant to an agreement with, on behalf of or at the direction of such CER:

(i) complies with all applicable export requirements of the United States;

(ii) complies with all applicable requirements of importing and transit countries regarding the importing and exporting of CEDs, or components of CEDs, into and out of such countries; and

(iii) maintains records documenting such compliance.

(B) (i) Before a CED, or component of a CED, is exported to a country that is not a member of the Organisation for Economic Co-operation and Development, commonly known as an OECD country, a CER shall ensure that any person exporting such CED or component of a CED, pursuant to an agreement with, on behalf of or at the direction of such CER, requests and receives, prior to shipping:

(I) documentation from the Competent Authority of each such transit or import country, that clearly verifies in English that the country legally accepts such imports; or

(II) confirmation from the United States Environmental Protection Agency or other federal agency, that the country legally accepts such imports.

(ii) For purposes of this subparagraph, the term ''Competent Authority'' means, for countries that have ratified the Basel Convention, the entity that provides documentation concerning the legality of transboundary transactions involving CEDs that the country classifies as Basel wastes. For countries that have not ratified the Basel Convention, the term ''Competent Authority'' means the national government entity legally responsible for determining the legality of transboundary transactions.

(C) Prior to export, a CER shall ensure that any person exporting a CED or component of a CED pursuant to an agreement with, on behalf of or at the direction of such CER:

(i) removes and handles separately all materials of concern; and

(ii) adequately processes CRTs and CRT glass for use as an industrial feedstock prior to export.

(iii) The provisions of clauses (i) and (ii) of this subparagraph do not apply if:

(I) the export is for purposes of legitimate reuse or refurbishment; or

(II) the CER has documented and ensures that there are regularly monitored controls in place to assure that all materials of concern will be removed in member countries of the Organisation for Economic Co-operation and Development.

(D) A CER shall ensure that CEDs or components of CEDs that are exported, pursuant to an agreement with, on behalf of or at the direction of such CER, are not stored, managed, handled, processed or disposed of in a manner that:

(i) conflicts with any applicable requirement of the locality or country into which CEDs are exported; or

(ii) poses an unreasonable risk to human health or which reasonably can or may be expected to create a source of pollution.

(7) Reporting. A CER shall submit to the commissioner, in accordance with a schedule and form prescribed by the commissioner, a report regarding activities undertaken pursuant to this section. The commissioner may require the submission of the following information in any such report:

(A) a narrative summary of the CER's activities regarding the reuse, refurbishment and recycling of CEDs, including, but not limited to, information concerning the reuse, refurbishment, transportation, storage, recycling of CEDs, including, components of CEDs. This summary may include information concerning CEDs that were exported, the identification of all entities to whom CEDs were exported, how any exported CEDs were either reused, refurbished or recycled, or the number of CEDs that were intended to be reused or refurbished but due to breakage in transit, a determination that a CED is off-specification, or for any other reason, were not reused or refurbished and the disposition of such CEDs;

(B) for computers, monitors, and printers, an accounting, by manufacturer, of the brand, type of device (i.e., computer, monitor, printer), number of units, and total weight by type of device that each month was sent for refurbishment or reuse, was transported or stored, or was sent for recycling, and information about the waste or residue from the recycling of CEDs that was sent for disposal. This accounting shall include computers, monitors and printers received by a CER from all sources, including, but not limited to, a municipality, a one-day collection event or any other source during the reporting period. This accounting shall also clearly identify all computers, monitors and printers that were transported, separated and stored for return to a manufacturer or for transport to a recycling facility of the manufacturer's choice pursuant subsection (q) of this section;

(C) for televisions, an accounting of the number of units and total weight of televisions that each month was sent for refurbishment or reuse, was transported or stored, or was sent for recycling, and information about the waste or residue from the recycling of televisions that was sent for disposal. This accounting shall include televisions received by a CER from all sources, including, but not limited to, a municipality, a one-day collection event, or any other source during the reporting period. This accounting shall also clearly identify all televisions that were transported, separated and stored for return to a manufacturer or for transport to a recycling facility of the manufacturer's choice pursuant subsection (q) of this section;

(D) the total weight, in pounds, of all electronic waste received by a CER from each municipality or regional collection point in Connecticut on a monthly basis.

This shall include electronic wastes received from all sources, including, but not limited to, a municipality, a one-day collection event or any other source during the reporting period. For purposes of this subparagraph, the term ''electronic waste'' means CEDs and non-CEDs, including, but not limited to, computer peripherals such as keyboards and mice, as well as VCRs, DVD players, telephones, cellular telephones, gaming devices, ipods, MP3 players, and similar electronic devices; and

(E) any other information requested by the commissioner.

(8) Recordkeeping.

(A) A CER shall ensure that the owner or operator of each recycling and disposal facility, used to implement the requirements of chapter 446n of the Connecticut General Statutes and this section, maintains for at least three years:

(i) all records required under this section, including, but not limited to, the records required by subsections (c)(1), (c)(2), (c)(3), (c)(4), (c)(6)(A)(iii), (c)(6)(B)(i)(I), (c)(6)(B)(i)(II), (c)(6)(C)(iii)(II), (d)(2), (d)(5), (e)(1)(B)(i), (e)(1)(B)(ii), (e)(2)(B), (e)(5)(A)(vi), and (e)(5)(B) of this section; and

(ii) records sufficient to demonstrate the movement of CEDs, including components of CEDs into and out of each facility used for the storage or recycling of CEDs, and the disposal of waste or residue generated from the recycling of CEDs, including, but not limited to, commercial contracts, bills of lading or other commercially-accepted documentation, as well as documentation of any brokering transactions.

(B) With respect to CEDs to be reused or refurbished, a CER shall maintain for at least three (3) years, records sufficient to demonstrate the movement of intact CEDs sent for reuse and refurbishment, including, but not limited to, commercial contracts, bills of lading or other commercially-accepted documentation, as well as documentation of any brokering transactions.

(C) All records that are required to be maintained under this section shall be provided to the commissioner upon request. The records shall be provided within the time period specified in any request, or if no time period is specified, not later than fourteen (14) days after the receipt of any such request.

(D) The retention period for all records required by this section shall be extended automatically during the course of any unresolved enforcement action regarding compliance with chapter 446n of the Connecticut General Statutes or this section.

(9) Notification of Cessation of Services. At least forty-five (45) days before a CER ceases to provide services under chapter 446n of the Connecticut General Statutes and this section, a CER shall provide the commissioner and all customers to whom the CER is providing such services, a written notice of its intent to cease providing services.

(d) **Specific Standards for the Reuse or Refurbishment of an Intact CED for Its Original Intended Purpose.** In addition to the requirements in subsection (c) of this section, a CER shall comply with the requirements in this subsection regarding the reuse or refurbishment of CEDs. The requirements of this subsection apply to an intact CED being reused or refurbished for its original intended purpose and do not apply to a CED being recycled. The requirements of this subsection do not apply to components of a CED that are reused or refurbished after dismantling or after being removed from a CED. For purposes of this section, such components shall be considered to be recycled and remain subject to all of the provisions of this section regarding the recycling of CEDs.

(1) Any activity associated with the reuse or refurbishment of any CED shall not be eligible for reimbursement by a manufacturer pursuant to chapter 446n of the

Connecticut General Statutes and this section, except as provided for by agreement pursuant to subsection (k) of this section.

(2) Unless a CER has already determined that a CED will be recycled, a CER shall ensure that each CED is pre-screened to determine if it is practical to reuse or refurbish the CED intact, for its original intended purpose. Any such pre-screening shall, at a minimum, include the testing of each CED to ensure that it can be reused or refurbished for its intended purpose. A CER shall ensure that each CED that successfully passes pre-screening testing is accompanied by a written certification from the tester certifying that such CED is intact and is functioning properly for its original intended purpose. A CER shall maintain a copy of each written certification provided pursuant to this subdivision. Immediately after determining, based upon pre-screening, that a CED is eligible to be reused or refurbished, a CER shall ensure that any hard drive or similar data storage device in or from such CED meets the Department of Defense, National Institute of Standards and Technology or National Association for Information Destruction standards for data erasure or destruction, or an equivalent standard approved in writing by the commissioner.

(3) Shipments of CEDs that have not been prescreened, as provided for in subdivision (2) of this subsection, or shipments containing both CEDs that have been prescreened for reuse or refurbishment and CEDs that have not been prescreened, shall be considered shipments for recycling and remain subject to all of the provisions of this section regarding the recycling of CEDs. Before shipping any CEDs for reuse or refurbishment a CER shall ensure that:

(A) a CED to be reused or refurbished for its original intended purpose meets legitimate reuse or refurbishment specifications as well as any additional specifications of the consignee or the person that will reuse or refurbish the CEDs; and

(B) the consignee, or if different, the person that will receive any CEDs, has a verified market for the reuse or refurbishment of all CEDs being shipped.

(4) A CER shall ensure that before being transported for reuse or refurbishment a CED is labeled and packaged in a manner that is consistent with preservation of the CED for reuse or refurbishment. Any such CED shall be stored and transported in a manner that does not diminish the value or the usability of the CED for its original intended purpose.

(5) A CER shall maintain records documenting the shipment of CEDs to the consignee for reuse or refurbishment, or if different, the person that will reuse or refurbish such CEDs. At a minimum, such records shall include:

(A) the name and address of the consignee, or if different, the person that will reuse or refurbish such CEDs;

(B) a description of the contents of the shipment and the quantity of each type of CED shipped expressed in pounds;

(C) the specifications of the consignee for the CEDs being shipped, or if different, the person that will reuse or refurbish CEDs and a description of how the transportation of the CEDs is in conformance with any such specifications;

(D) the amount paid for such CEDs, including any contract or similar document reflecting such payment; and

(E) a bill of lading or similar shipping document noting the shipment and acceptance of the CEDs.

(6) A CER claiming that CEDs are reused or refurbished under this subsection shall, in accordance with a request by the commissioner, including any time frame specified therein, provide:

(A) information demonstrating that there is a known market or disposition for the reuse or refurbishment of intact CEDs for their original intended purpose;

(B) information demonstrating that all CEDs shipped for reuse or refurbishment have been tested and are able to function for their original intended purpose;

(C) information demonstrating that all CEDs that a CER claims are reused or refurbished under this subsection, are in fact, reused or refurbished;

(D) information demonstrating that there is appropriate documentation (such as packaging procedures, contracts or other documents) to substantiate a CER's claim that intact CEDs are being reused or refurbished for their original intended purpose; or

(E) any other information the commissioner requests regarding CEDs that a CER claims were reused or refurbished.

(e) **Specific Standards for the Recycling of CEDs and the Disposal of Waste or Residue Generated from the Recycling of CEDs.** A CER shall comply with the requirements of this subsection regarding the recycling of CEDs and the disposal of waste or residue from the recycling of CEDs.

(1) General Standards.

(A) A CER shall ensure that all CEDs not reused or refurbished are safely managed and are recycled in a manner that generates value and minimizes waste. A CER shall ensure that any shipments of CEDs for recycling are prepared in a manner appropriate for processing and in a manner that does not diminish the value of any materials to be recovered from the CEDs being shipped. Shipments of CEDs that have not been prescreened, as provided for in subsection (d)(2) of this section, or shipments containing both CEDs that have been prescreened for reuse or refurbishment and CEDs that have not been prescreened, shall be considered shipments for recycling and remain subject to all of the provisions of this section regarding the recycling of CEDs.

(B) With respect to the waste or residue from the recycling of CEDs which cannot be reused, refurbished or recycled, a CER shall ensure that:

(i) consideration is given to whether the waste or residue has value for energy recovery and if so, that the waste or residue is burned for energy recovery. A CER shall ensure that preference is given to waste-to-energy incineration over incineration without energy recovery or land disposal. For wastes or residues that have value for energy recovery, but for which energy recovery is technically or economically infeasible, a CER shall maintain written documentation to demonstrate any such infeasibility; and

(ii) all wastes or residues are managed safely at facilities that are fully licensed by all appropriate governing authorities and that a written record substantiating compliance with this clause is maintained.

(2) Data Security. A CER shall ensure that, as soon as feasible, a hard drive or similar data storage device in or from any CED that is to be recycled, meets the Department of Defense National Institute of Standards and Technology or National Association for Information Destruction standards for data erasure or destruction or is physically destroyed by means of smelting, pulverizing, or shredding. A CER shall ensure that before any hard drive or similar data storage device meets the data erasure or destruction requirements of this subdivision or is physically destroyed, the hard drive or similar data storage device is maintained in a restricted area with controlled access and that the personal information on any such hard drive or device is secured from access by the general public and any untrained persons or employees. A CER shall also ensure that all employees at any recycling facility where such hard drives or devices are located are trained in data security requirements such that:

(A) any personal information on hard drives or similar data storage devices is secured from access by the general public or any untrained persons or employees; and

(B) a CER maintains records of all employee training provided pursuant to this subdivision, including the content of such training.

(3) Facility Security. A CER shall ensure the owner or operator of each recycling facility and each disposal facility, used to implement chapter 446n of the Connecticut General Statutes and this section, establishes and maintains a functioning security program that controls access to all areas of the facility where CEDs or components of CEDs are present in a manner appropriate for the type of CEDs, or the components of CEDs, being handled and meets the needs of the customer served. A security program shall control access to the facility or the portion of the facility where CEDs or components of CEDs are present and may include, but need not be limited to, badges for employees, an alarm system, metal detectors, surveillance cameras, indoor and outdoor lighting, or perimeter fencing.

(4) Environmental Management System.

(A) A CER shall ensure that the owner or operator of each recycling facility and each disposal facility, used to implement chapter 446n of the Connecticut General Statutes and this section, has an environmental management system in place that is reviewed for updates at least annually or updated more often, as necessary. The environmental management system shall, at a minimum, include a plan that:

(i) describes the facility's risk management objectives for environmental performance and compliance and its plans for attaining these objectives based on a ''plan-do-check-act'' continual improvement model;

(ii) provides for regular re-evaluation of the plan's environmental health and safety objectives and monitoring of the progress toward achievement of these objectives that shall be conducted and documented by or for the owner or operator of the facility; and

(iii) shall be kept at the facility at all times and made available to the commissioner upon request.

(B) In lieu of compliance with subparagraph (A) of this subdivision, a CER may request that the commissioner recognize that a certification or credential granted by an independent entity meets the requirements of subparagraph (A) of this subdivision. Any such request shall be in writing and shall, at a minimum, provide information about the entity issuing the credential or certification and the requirements to obtain any such certification or credential. The commissioner shall have the sole discretion to determine whether or not a certification or credential meets, or continues to meet, the requirements of subparagraph (A) of this subdivision and will notify the CER, in writing, of the commissioner's determination. To be able to continue to rely upon a certification or credential approved by the commissioner pursuant to this subparagraph, in lieu of compliance with subparagraph (A) of this subdivision, a CER shall:

(i) ensure that the owner or operator of each recycling facility or each disposal facility, as applicable, maintains compliance with all of the requirements of any such certification or credential;

(ii) notify the commissioner, in writing, whenever the requirements for obtaining such certification or credential change, including a description of all changes made; and

(iii) notify the commissioner, in writing, whenever the certification or credential ceases to exist or is no longer offered or issued.

For purposes of this subdivision an independent entity means an entity that issues a certification or credential concerning environmental management systems and that

is not affiliated, employed or subject to control, restriction or limitation by the owner or operator of the recycling or disposal facility issued such certification or credential. Any such entity shall not be affiliated with the owner or operator of any such recycling or disposal facility through any indirect or direct, familial, corporate or financial relationship and shall not render services or provide a certification or credential under an arrangement whereby no fee will be charged if a specified finding or result is attained, or where the payment of a fee, or the amount of the fee, is in any way dependent upon a specified finding or result of such services, certification or credential.

(5) Environmental Health and Safety Measures.

(A) A CER shall ensure that the owner or operator of each recycling facility and each disposal facility, used to implement chapter 446n of the Connecticut General Statutes and this section, takes sufficient measures to safeguard occupational and environmental health and safety in accordance with local, state, national and international laws, regulations, agreements, principles and standards and guidelines. Such measures shall, at a minimum, include:

(i) environmental health and safety training of personnel, including training with regard to material and equipment handling, worker exposure, controlling releases and safety and emergency procedures;

(ii) where materials are shredded or heated, appropriate measures to protect workers, the general public and the environment from hazardous dusts, emissions, and other pollutants. Such measures shall include adaptations in equipment design or operational practices, air flow controls, personal protective devices for workers, pollution control equipment or a combination of these measures;

(iii) an up-to-date, written hazardous materials identification and management plan that specifically addresses lead, mercury, beryllium, cadmium, batteries, toner, phosphor compounds, polychlorinated biphenyls or PCBs and brominated flame retardants and other halogenated materials, with particular focus on the possible generation of by-product dioxins and furans, and any other substance specified in writing by the commissioner;

(iv) an up-to-date, written plan for reporting and responding to pollutant releases, including emergencies, such as accidents, spills, fires and explosions;

(v) proof of liability insurance for pollutant releases, accidents and other emergencies; and

(vi) an environmental health and safety audit performed by a qualified independent auditor. Audits shall be conducted on an annual basis and any recommendations for corrective action resulting from such audits shall be implemented in a timely manner. Documentation of the performance of such audits and of any corrective measures taken in response to such audits shall be retained by the owner or operator of the facility being audited.

(B) A CER shall ensure that the owner or operator of each recycling facility and each disposal facility, used to implement chapter 446n of the Connecticut General Statutes and this section, has a regularly-implemented and documented monitoring and recordkeeping program that tracks key process parameters, compliance with relevant safety procedures, effluents and emissions, and incoming and outgoing materials, residues and wastes, including storage of such materials, residues and wastes.

(C) In lieu of compliance with subparagraph (A) of this subdivision, a CER may request that the commissioner recognize that a certification or credential issued by an independent entity meets all or a portion of the requirements of subparagraph

(A) of this subdivision. Any such request shall be in writing and shall, at a minimum, provide information about the entity issuing the credential or certification and the requirements to obtain any such certification or credential. The commissioner shall have the sole discretion to determine whether or not a certification or credential meets, or continues to meet, the requirements of subparagraph (A) of this subdivision and will notify the CER, in writing, of the commissioner's determination. To be able to continue to rely upon a certification or credential approved by the commissioner pursuant to this subparagraph, in lieu of compliance with subparagraph (A) of this subdivision, a CER shall:

(i) ensure that the owner or operator of each recycling facility or each disposal facility, as applicable, maintains compliance with all of the requirements of any such certification or credential;

(ii) notify the commissioner, in writing, whenever the requirements for obtaining such certification or credential change, including a description of all changes made; and

(iii) notify the commissioner, in writing, whenever the certification or credential ceases to exist or is no longer offered or issued.

For purposes of this subdivision an independent entity means an entity that issues a certification or credential concerning environmental health and safety measures and that is not affiliated, employed or subject to control, restriction or limitation by the owner or operator of the recycling or disposal facility issued such certification or credential. Any such entity shall not be affiliated with the owner or operator of any such recycling or disposal facility through any indirect or direct, familial, corporate or financial relationship and shall not render services or provide a certification or credential under an arrangement whereby no fee will be charged if a specified finding or result is attained, or where the payment of a fee, or the amount of the fee, is in any way dependent upon a specified finding or result of such services, certification or credential.

(6) Insurance.

(A) A CER shall ensure that the owner or operator of each recycling facility and each disposal facility, used to implement chapter 446n of the Connecticut General Statutes and this section, that either recycles or disposes of materials of concern shall establish and maintain, at a minimum the following insurance coverage for each such facility, unless such insurance coverage is not offered or is unobtainable:

(i) Commercial General Liability: $1,000,000 combined single limit per occurrence with an annual aggregate of $2,000,000 for bodily injury, personal injury and property damage. Coverage shall extend to independent contractors, products and completed operations, contractual liability and broad form property damage; and

(ii) Pollutant Releases, Accidents, and Other Emergencies (''Pollution Legal Liability''):

(I) for facilities where whole CEDs are dismantled, shredded, crushed or processed in a similar manner: $3,000,000 combined single limit per occurrence with an annual aggregate of $6,000,000 for on-site and off-site bodily injury, property damage or clean up costs including liability for environmental damage resulting from sudden, accidental and gradual pollution in the operation, maintenance, or use of any motor vehicle for transportation of CEDs or any facility operation involving CEDs; and

(II) for all other recycling or disposal facilities: $1,000,000 combined and single limit per occurrence with an annual aggregate of $2,000,000 for on-site and off-site bodily injury, property damage or clean up costs including liability for environmental damage resulting from sudden, accidental and gradual pollution in the operation,

maintenance, or use of any motor vehicle for transportation of CEDs or any facility operation involving CEDs.

For the purposes of this subparagraph, insurance coverage shall not be deemed to not be offered or to be unobtainable if the owner or operator of such recycling facility or disposal facility is denied insurance coverage or if such owner or operator elects to not obtain such insurance coverage.

(B) The insurance used to satisfy the requirements of this subdivision shall:

(i) not be ''claims made coverage'' with the exception of Pollution Legal Liability coverage;

(ii) be primary and non-contributory and shall be maintained throughout the period that a facility is recycling CEDs or components of CEDs, or a facility is disposing of the waste or residue generated by the recycling of CEDs, for which a CER is seeking reimbursement pursuant to chapter 446n of the Connecticut General Statutes and this section; and

(iii) cover any suit, claim, loss, injury, damage, attorney fees, judgments, litigation or any other expense arising out of or alleged to have arisen out of the recycling of CEDs or components of CEDs or the disposal of the waste or residue generated from the recycling of CEDs.

(C) A CER shall immediately notify the commissioner, in writing, by certified mail of any cancellations, expirations or other changes that may affect the coverage used to satisfy the requirements of this subdivision. Such notification shall include:

(i) a detailed description and explanation for such change(s), including corrective action to be taken to rectify the insurance coverage and a schedule for implementing such action; or

(ii) if available, evidence of alternate insurance coverage; and

(iii) a certification that there will be no lapse in coverage.

(D) A CER shall ensure that the owner or operator of each recycling facility and each disposal facility, other than those specified in subparagraph (A) of this subdivision that recycles or disposes of CEDs or components of CEDs pursuant to chapter 446n of the Connecticut General Statutes and this section, establishes and maintains liability insurance for pollutant releases, accidents and other emergencies for any such facility in connection with the recycling or disposal of CEDs or components of CEDs and that such insurance is maintained throughout the period that such facility is recycling CEDs or components of CEDs or disposing of waste or residue from the recycling of CEDs or components of CEDs.

(E) The commissioner may require that a CER ensure that the owner or operator of a recycling or disposal facility obtain and maintain insurance at a specified minimum level or at a level that exceeds the amounts prescribed in this subdivision.

(7) Closure plan and financial assurance or other guarantees.

(A) A CER shall ensure that the owner or operator of each recycling facility and each disposal facility, used to implement chapter 446n of the Connecticut General Statutes and this section that recycles or disposes of materials of concern, has and maintains a closure plan for any such facility. Any such closure plan shall provide a detailed description of the methods and procedures to be utilized for the closure of all of the units or equipment used for recycling CEDs, or components of CEDs, when recycling activities are no longer conducted, and for the disposal of waste or residue generated from the recycling of CEDs, or components of CEDs. The plan shall also include a cost estimate for such closure. The cost estimate shall:

(i) be based on the costs to the owner or operator of the facility to hire a third party to close the facility. A third party is a party who is neither a parent company

nor a subsidiary of the owner or operator. The cost estimate shall include, at a minimum, the cost of transporting and recycling or disposing of all CEDs and components of CEDs and decontaminating recycling areas and equipment or containers used in recycling CEDs or disposing of the waste or residue from the recycling of CEDs; and

(ii) not incorporate zero cost for any CED, component of a CED or residue or waste from the recycling of CEDs that may have economic value, but shall incorporate a cost for all of these items.

(B) The closure plan and cost estimate required by subparagraph (A) of this subdivision shall be updated whenever there is a change in operations that affects the cost of closing the facility. Cost estimates shall be adjusted at least annually for inflation using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its ''Survey of Current Business'' or its Bureau of Economic Analysis news release.

(C) The requirements of subparagraphs (A) and (B) of this subdivision may be met through other means acceptable to the Commissioner, including, but not limited to, a government program that provides the functional equivalent to compliance with such requirements.

(D) A CER shall ensure that the owner or operator of a facility, subject to subparagraph (A) of this subdivision, establishes and maintains an irrevocable financial assurance instrument or other guarantee to cover 100% of the costs of closing its facility, including any revisions to the closure plan and cost estimate required in subparagraph (B) of this subdivision if any such assurance is required by applicable laws and regulations of the state or locality where a facility is located or by a permit issued by a governmental entity for any such facility.

(E) A CER shall immediately notify the commissioner, in writing, by certified mail of any cancellations, expirations or other changes that may affect the financial assurance coverage used to satisfy the requirements of this subdivision. Such notification shall include:

(i) a detailed description and explanation for such change(s), including corrective action to be taken to rectify the coverage and a schedule for implementing such actions; or

(ii) if available, evidence of alternate financial assurance coverage; and

(iii) a certification that there will be no lapse in coverage.

(8) Audits. A CER shall ensure that a manufacturer, or its designee, is able to conduct an audit of any recycling or disposal facility used to recycle the manufacturer's CEDs or to dispose of waste or residue from the recycling of the manufacturer's CEDs pursuant to chapter 446n of the Connecticut General Statutes and this section. Such audits may include any records that are required to be maintained pursuant to chapter 446n of the Connecticut General Statutes and this section. Such audit shall be conducted by a qualified person during normal business hours and a manufacturer, or its designee, shall provide reasonable notice to the CER and to the owner or operator of the facility to be audited before conducting an audit. The purpose of an audit shall be to evaluate compliance with chapter 446n of the Connecticut General Statutes and this section, and to verify the accuracy of any information provided either to the manufacturer or to the commissioner. A manufacturer may provide the commissioner with the results of any audit it performs and shall provide the results of an audit to the commissioner upon request. Nothing in this subdivision shall affect the commissioner's authority to conduct inspections or to take any other action authorized by law.

(f) **Determination of Brands Attributable to a Manufacturer.**

(1) The commissioner shall determine the brand or brands attributable to a manufacturer of computers, monitors and printers. This determination shall be used to implement the requirements of chapter 446n of the Connecticut General Statutes and this section, including, but not limited to, billing by CERs. The commissioner shall make this brand determination each year, or more often as necessary, based upon information provided by manufacturers or CERs, or other information obtained by the department. Such information may include, but is not limited to, information from the department's contractor, the United States Patent and Trademark Office, electronic waste collection programs in other jurisdictions, or information from reputable sources such as the ''The Thomas Register'', ''Gale Trade Name Directory'', ''Headquarters USA'', ''Dun and Bradstreet Industry Handbook'', trade association directories or other similar sources.

(2) The commissioner shall post a determination of the brands attributable to each manufacturer on the department's website. This determination shall also be provided to each registered manufacturer, in writing, at the most recent address provided to the commissioner by the manufacturer. The commissioner's determination shall constitute a rebuttable presumption that such brand is attributable to a manufacturer. A manufacturer seeking to rebut the commissioner's brand determination shall provide the commissioner with information, in writing, disputing the determination, including the reasons why the determination is incorrect and, if available, identifying the manufacturer that should be responsible for the brand in question. Any supporting documents shall accompany this submission to the commissioner. After the receipt of such information the commissioner shall make a final determination regarding the brand attributable to a manufacturer.

(3) A manufacturer that claims that it is no longer legally responsible for a brand shall notify the commissioner, in writing, on a form prescribed by the commissioner. A manufacturer shall remain legally responsible for a brand until the commissioner makes a brand attribution adjustment pursuant to this subdivision. A manufacturer that becomes legally responsible for a brand that it was not previously responsible for shall notify the commissioner, in writing, on a form prescribed by the commissioner, not later than thirty (30) days after becoming legally responsible for a brand. When providing notice pursuant to this subdivision, a manufacturer shall provide documentation regarding the brand in question and shall provide the commissioner with any information the commissioner requests regarding such brand. After receipt of a notice pursuant to this subdivision, the commissioner shall decide whether or not to make the brand attribution adjustment for which notice was provided. The commissioner's determination shall be posted on the department's website and shall be provided, in writing, to the CERs and all affected manufacturers.

(4) This subsection shall not be applicable to a manufacturer of televisions.

(g) **Determining a Manufacturer's Market Share.**

(1) The commissioner shall determine a manufacturer's market share each year. This market share determination shall:

(A) for all manufacturers, be used to determine a manufacturer's annual registration renewal fee;

(B) for manufacturers of televisions, be used for billing by a CER; and

(C) for manufacturers of computers, monitors and printers, be used to determine a manufacturer's responsibility for orphan devices.

(2) For each type of CED, the commissioner shall determine a manufacturer's market share, for the purposes specified in subsection (1) of this section, based upon

information that approximates the total number of units sold by all manufacturers for the previous year and approximates the number of units sold that are attributable to each manufacturer. This determination shall be based upon nationally available market share data, including, but not limited to, the number of units shipped, retail sales data, consumer surveys, information provided by the manufacturers, or other nationally available market share data.

(3) (A) For each type of CED, the commissioner shall post on the department's website a determination of the market share attributable to each manufacturer. This determination shall also be provided to each registered manufacturer, in writing, at the address provided on the manufacturer's registration or a more recent address provided to the commissioner by a manufacturer.

(B) The commissioner's determination shall constitute a rebuttable presumption of the market share attributable to a manufacturer. From the date that the proposed market share attributable to each manufacturer is posted on the department's website, a manufacturer shall have not more than thirty (30) days to rebut the commissioner's determination. A manufacturer that does not avail itself of this opportunity shall be precluded from contesting the commissioner's determination of such manufacturer's market share.

(C) A manufacturer seeking to rebut the commissioner's determination shall provide the commissioner with the number of units sold, for the type of CED in question, based upon nationally available data, number of units shipped, retail sales data, consumer surveys or other nationally available data and the source of any such information. The information may concern more than one manufacturer and any supporting documents shall accompany this submission to the commissioner. After the receipt of such information, the commissioner shall make a final determination regarding each manufacturer's market share.

(4) Subject to the provisions of subdivision (6) of this subsection, if, due to inability to pay, the manufacturer of a CED no longer pays its market share, or a similar circumstance arises, the commissioner may reallocate the market share of such a manufacturer to the other manufacturers of that CED. Any such reallocation shall be proportional, based upon the market share of the other manufacturers, provided that:

(A) if the CED is a television, the market share shall be reallocated to manufacturers that have one tenth of one (0.1%) per cent or more of the market share for televisions; or

(B) if the CED is a computer, monitor or printer, the market share shall be reallocated to manufacturers that have one (1%) per cent or more of the market share for the type of CED in question.

(5) Any reallocation of the market share of manufacturers shall be posted on the department's website and be provided, in writing, to the manufacturers at the most recent address provided to the commissioner by a manufacturer. Any reallocation of a manufacturer's market share shall apply prospectively only, from the date that such recalculated market shares are posted on the department's website.

(6) Subdivision (4) of this subsection shall not apply to the transfer of a manufacturer's market share to another person. Such transfers shall be governed by this subdivision. With the written approval of the commissioner, for the purposes specified in subdivision (1) of this subsection, a manufacturer's market share may be transferred to another manufacturer, or to a person that purchases, becomes responsible for, or assumes the liabilities of a manufacturer.

(h) **Specific Market Share Provisions Applicable to Orphan Devices.**

(1) The commissioner shall post on the department's website and provide each manufacturer, in writing, at the address provided on the manufacturer's registration or a more recent address provided to the commissioner by a manufacturer, the manufacturer's share, based upon its market share, for orphan devices which for purposes of this section shall be known as its pro rata share. This shall include any de minimis share allocated to a manufacturer under subdivision (2) of this subsection.

(2) If pursuant to subsection (g) of this section, the commissioner determines that a manufacturer's market share for a single type of CED, for a one year period, is less than one (1%) per cent of the total market share for that type of CED, such a share shall be deemed to be de minimis. A manufacturer of a de minimis share shall not be responsible for payment of a pro rata share of the orphan devices that are recycled for the corresponding billing year. Rather, de minimis market shares shall be added together, allocated to, and paid for by the manufacturers that have one percent (1%) or more of the market share for the type of CED in question, proportionally, based upon their market share.

(3) This subsection shall not apply to manufacturers of televisions.

(i) **Specific Market Share Provisions Applicable to Televisions.** If pursuant to subsection (g) of this section, the commissioner determines that a manufacturer's market share for televisions, for a one year period, is less than one tenth of one per cent (0.1%) of the total market share for televisions, such a share shall be deemed to be de minimis. A manufacturer of a de minimis share shall not be responsible for payment of a pro rata share of the televisions that are recycled for the corresponding billing year. Rather, de minimis market shares shall be added together, allocated to, and paid for by the manufacturers that have one tenth of one (0.1%) per cent or more of the market share for televisions, proportionally, based upon their market share.

(j) **Amount Owed by a Manufacturer and Billing.**

(1) A CER and a manufacturer shall work cooperatively to ensure implementation of a practical and feasible billing system. A CER shall only submit an invoice regarding a CED generated by a household in Connecticut. Before submission of an invoice to a manufacturer, the CER and each manufacturer shall provide each other with the information necessary to facilitate billing and payment. A CER shall not seek reimbursement for costs related to a CED that was not recycled, or for costs associated with a CED that was refurbished or reused, except as may be provided for by agreement pursuant to subsection (k) of this section. A manufacturer shall pay the initial invoice received from a CER not more than ninety (90) days after the date of receipt of such invoice. Thereafter, all invoices from such CER shall be paid within thirty (30) days of receipt by the manufacturer. A CER shall notify the commissioner, in writing, as soon as possible, whenever a manufacturer is in arrears, for any amount, more than ninety (90) days. The provisions of subdivisions (2) to (8), inclusive, of this subsection may be varied by agreement between a CER and manufacturer, as provided for in subsection (k) of this section.

(2) At a minimum, a CER shall bill a manufacturer quarterly. Unless varied by agreement pursuant to subsection (k) of this section, for the activities and services described in subsections (b)(3)(H) and (b)(3)(I) of this section, a CER shall not charge more than the fees in the most recent application approved by the commissioner submitted by a CER pursuant to subsection (b)(3) of this subsection, or the fees approved by the commissioner pursuant to subsection (b)(5)(B) of this section. If multiple CERs are involved in the recycling of a CED, only one CER shall submit

an invoice to a manufacturer. Each invoice from a CER to a manufacturer shall provide the information described in subparagraphs (A) and (B) of this subdivision. This information shall be provided separately for computers, monitors, printers and televisions.

(A) Invoices regarding computers, monitors and printers, with each broken out separately, shall, for the period covered by the invoice, include:

(i) the number of units by brand, for each brand attributable to a manufacturer;

(ii) the total weight by brand, for each brand attributable to a manufacturer;

(iii) the number of units, total weight by brand, if known, for orphan devices;

(iv) the manufacturer's pro rata share for orphan devices;

(v) the total cost per pound in accordance with the most recent fee approved by the commissioner or agreed to by the CER and the manufacturer; and

(vi) the total amount due from the manufacturer, calculated in accordance with subdivisions (3), (4) and (5) of this subsection.

(B) Invoices regarding televisions shall, for the period covered by the invoice, include:

(i) the total weight for all televisions, which shall include separately, the total weight of all televisions recycled and the total weight of all televisions returned to a manufacturer or to a facility designated by a manufacturer;

(ii) the manufacturer's market share;

(iii) the total cost per pound in accordance with the most recent fee approved by the commissioner or agreed to by the CER and the manufacturer; and

(iv) the total amount due from the manufacturer, calculated in accordance with subdivisions (6), (7) and (8) of this subsection.

(3) The amount due for the period covered by an invoice submitted to a manufacturer for computers, monitors and printers that are recycled, each figured separately, shall be calculated as follows:

$$A_R = [M_R + (O \times S_R)] \times R$$

Where:

A_R = the amount due from the manufacturer in U.S. dollars;

M_R = total weight, in pounds, of the brands for which the manufacturer is responsible that are recycled;

O = total weight, in pounds, of orphan devices;

S_R = the manufacturer's *pro rata* share of orphan devices, expressed as a decimal, if the manufacturer's share for orphan devices is recycled by a CER. This amount will be zero if the manufacturer's share for orphan devices is returned to a manufacturer or a facility designated by a manufacturer; and

R = fee for the total cost of transporting and recycling CEDs, expressed as a price in U.S. dollars per pound, in accordance with the most recent fee approved by the commissioner or agreed to by the CER and the manufacturer.

(4) The amount due for the period covered by an invoice submitted to a manufacturer for computers, monitors and printers, each figured separately, that are returned to a manufacturer or a facility designated by a manufacturer pursuant to subsection (q) of this section, shall be calculated as follows:

$$A_D = [M_D + (O \times S_D)] \times D$$

Where:

A_D = amount due from the manufacturer in U.S. dollars;
M_D = total weight, in pounds, of the brands for which the manufacturer is responsible that are returned to a manufacturer or a facility designated by a manufacturer;
O = total weight, in pounds, of orphan devices;
S_D = the manufacturer's *pro rata* share of orphan devices, expressed as a decimal, if the manufacturer's share for orphan devices is returned to a manufacturer or a facility designated by a manufacturer. This amount will be zero if the manufacturer's share for orphan devices is not returned to a manufacturer or a facility designated by a manufacturer but is recycled by a CER; and
D = fee for the total cost for a computer, monitor or printer, including any orphan devices, being returned to a manufacturer or a facility designated by a manufacturer, expressed as a price in U.S. dollars per pound, in accordance with the most recent fee approved by the commissioner or agreed to by the CER and the manufacturer.

(5) The total amount due for the period covered by an invoice submitted to a manufacturer for computers, monitors and printers, each figured separately, shall be equal to the sum of A_R and A_D as calculated under subdivisions (3) and (4) of this subsection.

(6) The amount due for the period covered by an invoice submitted to each manufacturer for those televisions that are recycled shall be calculated as follows:

$$A = W_R \times MS \times R$$

Where:

A = amount due from the manufacturer in U.S. dollars;
W_R = the total weight, in pounds, of all televisions that are recycled;
MS = the manufacturer's market share expressed as a decimal; and
R = fee for the total cost of transporting and recycling CEDs, expressed as a price in U.S. dollars per pound, in accordance with the most recent fee approved by the commissioner or agreed to by the CER and the manufacturer.

(7) The amount due for the period covered by an invoice submitted to each manufacturer for those televisions that are returned to a manufacturer or a facility designated by a manufacturer pursuant to subsection (q) of this section shall be calculated as follows:

$$A = W_D \times MS \times D$$

Where:

A = amount due from the manufacturer in U.S. dollars;
W_D = the total weight, in pounds, of all televisions that are returned to a manufacturer or to a facility designated by a manufacturer;
MS = the manufacturer's market share expressed as a decimal; and
D = fee for the total cost of televisions being returned to a manufacturer or facility designated by a manufacturer, expressed as a price in U.S. dollars per pound, in accordance with the most recent fee approved by the commissioner or agreed to by the CER and the manufacturer.

(8) When an invoice submitted to each manufacturer includes both televisions that are recycled and other televisions that are returned to a manufacturer, or a

facility designated by the manufacturer, the amount due from each manufacturer for televisions shall be the sum of the amount due as calculated under subdivisions (6) and (7) of this subsection.

(k) **Agreements or Arrangements between a CER and a Manufacturer.**

(1) A CER and a manufacturer may enter into an agreement or establish an arrangement that:

(A) allows the CER to vary the per pound price in its application approved by the commissioner pursuant to subsection (b) of this section or the fees approved by the commissioner pursuant to subsection (b)(5)(B) of this section;

(B) provides for billing arrangements that are different from the arrangements specified in subsections (j) (2) to (8), inclusive, of this section; or

(C) allows the CER to bill the manufacturer for costs associated with the reuse or refurbishment of CEDs.

(2) An agreement or arrangement between a CER and manufacturer may include any limitation on services to be provided by the CER that are otherwise eligible as allowable costs, or may make provision for providing additional services. The provisions of any such agreement or arrangement shall be enforced by the entities entering into such agreement or arrangement. Notwithstanding the terms and conditions of any agreement or arrangement between a CER and a manufacturer, including any agreement or arrangement that limits the services a CER may provide, compliance with chapter 446n of the Connecticut General Statutes and this section, except for the provisions specified in the subdivision (1) of this subsection, shall be required and remain in effect.

(*l*) **Requirements for Printer Manufacturers and Retailers.**

(1) Each time the term ''CED'' is used in chapter 446n of the Connecticut General Statutes and this section, it shall be read to include printers. Notwithstanding the foregoing, compliance with:

(A) subsections (a), (b) and (c) of section 22a-630 of the Connecticut General Statutes regarding printers shall not be required prior to June 1, 2010; and

(B) section 22a-633 of the Connecticut General Statutes regarding printers shall not be required until on or after September 29, 2010.

(2) A manufacturer of printers shall comply with the registration requirements in subsection (o) of this section.

(m) **Municipal Requirements.**

(1) Definitions. For purposes of this subsection:

(A) ''municipality'' means any town, city, borough, village, consolidated town and city, consolidated town and borough, or a regional authority representing any such entities; and

(B) ''approved plan'' means a municipal plan that has been approved by the commissioner.

(2) Submission of a Plan.

(A) Not later than July 1, 2010, a municipality shall submit a plan, in writing, to the commissioner, for the commissioner's review and written approval. The plan shall be submitted on a form prescribed by the commissioner and shall describe how the municipality will comply with the requirements of section 22a-631(b) of the Connecticut General Statutes, including, but not limited to, how the municipality will give priority to convenience and accessibility in providing collection and recycling opportunities to its residents and any other information deemed necessary by the commissioner.

(B) The commissioner shall notify the municipality, in writing, whether or not the plan submitted is approved. If a plan is not approved, the notification to the municipality shall indicate the reasons for any such disapproval and any municipality receiving such notification shall correct the deficiencies identified by the commissioner and shall submit a revised plan, in writing, within the time frame specified by the commissioner or, if no time is specified, not more than thirty (30) days after receipt of the notification from the commissioner. When approving a plan, the commissioner may include any conditions the commissioner deems necessary to protect human health or the environment, or to ensure compliance with chapter 446n of the Connecticut General Statutes or this section, including, but not limited to, giving priority to convenience and accessibility in providing collection and recycling opportunities to the residents of a municipality.

(C) A municipality shall implement and comply with the plan approved by the commissioner.

(D) Any plan submitted by a municipality and approved by the commissioner before these regulations take effect shall satisfy the requirements of this subdivision.

(3) Modifying a Plan.

(A) A municipality may request a modification to a plan previously approved by the commissioner at any time.

(B) A municipality shall request a modification to an approved plan not more than fifteen (15) days after the date a municipality becomes aware or should become aware:

(i) of any significant or material changes to an approved plan; or

(ii) that information submitted to the commissioner, at any time, is or was inaccurate or misleading or that any relevant information is or was omitted.

(C) Any request to modify a plan previously approved by the commissioner shall be submitted in writing on a form prescribed by the commissioner and, if applicable, shall include any corrected or omitted information. An approved plan shall be modified in accordance with the procedures specified in subdivision (2) of this subsection.

(D) If at any time, the commissioner determines that a municipality's approved plan is deficient or otherwise not in compliance with chapter 446n of the Connecticut General Statutes or this section, the commissioner shall notify the municipality in writing, of such deficiency or non-compliance. Upon receipt of any such notice, the municipality shall address the deficiencies or issues identified by the commissioner and shall submit a revised plan, in writing, within the time specified by the commissioner or, if no time is specified, not more than thirty (30) days after receipt of the notification from the commissioner.

(E) When approving a modification to an approved plan, the commissioner may include any conditions the commissioner deems necessary to protect human health or the environment, or to ensure compliance with chapter 446n of the Connecticut General Statutes or this section, including, but not limited to, giving priority to convenience and accessibility in providing collection and recycling opportunities to the residents of a municipality. A modification shall not be considered part of the municipality's approved plan, unless any such modification is approved by the commissioner in writing.

(F) A municipality shall implement and comply with the modified plan as approved by the commissioner.

(4) Notification of CER. Not later than fifteen (15) days after making arrangements with a CER or CERs, a municipality shall provide written notice to the commissioner

identifying the CER or CERs with whom the municipality has made arrangements to implement the requirements of chapter 446n of the Connecticut General Statutes and this section. If a previously identified CER changes, not later than fifteen (15) days after such change, the municipality shall notify the commissioner in writing of such change and shall identify the new CER or CERs.

(5) No Fee. A municipality shall not charge its residents any fee for the collection, storage, transportation, recycling, reuse or refurbishment of seven or fewer CEDs brought to a collection point, at any one time, pursuant to section 22a-635(b) of the Connecticut General Statutes.

(6) Compliance with Applicable Requirements. A municipality shall comply with all applicable requirements, including, but not limited to, obtaining necessary permits or authorizations, when implementing a plan approved by the commissioner pursuant to this subsection.

(7) Approved Plan Not a Permit or Authorization. A plan approved by the commissioner pursuant to this subsection shall not constitute a permit or authorization to collect, store, recycle or otherwise manage or handle CEDs.

(n) **Adding an Electronic Device to the List of CEDs.**

(1) The commissioner may add an electronic device to the list of CEDs by adoption of regulations, in accordance with the provisions of chapter 54 of the Connecticut General Statutes. To add a device to the list of CEDs, the commissioner may consider:

(A) information obtained by the department, which may or may not include estimates of the number of such devices shipped, in use, sold, generated or disposed of;

(B) the potential cost savings to municipalities by adding the device to the list of CEDs;

(C) whether the device contains substances that may have an adverse impact to human health or the environment;

(D) existing programs to manage or recycle the device and the efficacy of such programs;

(E) the options available for managing the device, including, but not limited to, the feasibility of reusing or recycling such devices; or

(F) any other factor deemed significant by the commissioner.

(2) When adding an electronic device to the list of CEDs, the commissioner shall make available on the department's website the commissioner's rationale for adding such device, which may include a discussion of the criteria specified in subdivision (1) of this subsection.

(o) **Registration Requirements for Manufacturers.**

(1) Initial Registration.

(A) Requirements for Manufacturers of Computers, Monitors and Televisions.

(i) In accordance with sections 22a-630(a) and (b) of the Connecticut General Statutes, a manufacturer of CEDs that sold, or offered CEDs for sale by any means in Connecticut prior to January 1, 2008, shall register with the department not later than January 1, 2008 and, if required, shall pay an initial registration fee of five thousand dollars.

(ii) A manufacturer of CEDs that has not sold CEDs by any means in Connecticut before January 1, 2008, but sold or offers CEDs for sale by any means in Connecticut on or after January 1, 2008, but before June 1, 2010, shall register with the department on a form prescribed by the commissioner no later than July 31, 2010.

(iii) A manufacturer of CEDs that has not submitted a registration under clause (i) or (ii) of this subparagraph and has not sold or offered CEDs for sale by any means in Connecticut on or before June 1, 2010, but who sells or offers CEDs for sale by any means in Connecticut after June 1, 2010, shall register with the department on a form prescribed by the commissioner, before the manufacturer sells or offers CEDs for sale in Connecticut.

(iv) A manufacturer, described in clause (ii) or (iii) of this subparagraph, shall submit with the registration required by clause (ii) or (iii) of this subparagraph an initial registration fee of five thousand dollars and an additional fee equivalent to the greater of:

(I) one (1%) per cent of the prior year's total share of orphan devices, for each category of applicable CEDs, expressed in pounds multiplied by fifty cents; or

(II) one thousand dollars.

(v) For purposes of this subparagraph only, the term ''CED'' shall not include printers.

(B) Registration Requirements for Manufacturers of Printers.

(i) A manufacturer that has already submitted a registration under subparagraph (A)(i) or (ii) of this subdivision and that has sold or offered printers for sale by any means in Connecticut on or before June 1, 2010, shall submit a revised registration to the department, on a form prescribed by the commissioner, not later than July 31, 2010.

(ii) A manufacturer, other than a manufacturer described in clause (i) of this subparagraph, that has sold or offered printers for sale by any means in Connecticut on or before June 1, 2010 shall register with the department, on a form prescribed by the commissioner, not later than July 31, 2010. Such registration shall be accompanied by the annual renewal registration fee determined by the commissioner in accordance with section 22a-630(d)-1 of the Regulations of Connecticut State Agencies.

(iii) A manufacturer, other than a manufacturer described in clause (i) of this subparagraph, that has not sold or offered printers for sale by any means in Connecticut before June 1, 2010, but sells or offers printers for sale by any means in Connecticut after June 1, 2010 shall register with the department, on a form prescribed by the commissioner. Any such registration shall be submitted before the manufacturer sells or offers printers for sale in Connecticut and shall also be accompanied by an initial registration fee of five thousand dollars and an additional fee equivalent to the greater of:

(I) one (1%) per cent of the prior year's total share of orphan devices for printers expressed in pounds multiplied by fifty cents; or

(II) one thousand dollars.

(2) Annual Re-Registration Requirements for Manufacturers of All CEDs. Commencing on a date established by the commissioner, and annually thereafter, a manufacturer that sells or offers CEDs for sale by any means in Connecticut shall re-register with the department on a form prescribed by the commissioner. At least thirty (30) days before the date that any such re-registration is required, the commissioner shall notify a manufacturer, in writing, at the address provided on the manufacturer's registration or a more recent address provided to the commissioner by a manufacturer, of the date when re-registration is required. Each annual re-registration shall be accompanied by an annual registration renewal fee as determined by the commissioner in accordance with section 22a-630(d)-1 of the Regulations of Connecticut State Agencies.

(3) Revisions to a Registration.

(A) A manufacturer that has submitted a registration to the department shall submit a revised registration to the department, on a form prescribed by the commissioner, whenever:

(i) the manufacturer sells, or offers for sale by any means in Connecticut, a type of CED that the manufacturer has not indicated it is selling, or offering for sale, in any registration or revised registration submitted to the department. The manufacturer shall submit a revised registration prior to selling, or offering for sale, by any means in Connecticut, such CED;

(ii) the manufacturer sells, or offers for sale by any means in Connecticut, a new brand of CED that the manufacturer has not indicated that it is selling or offering for sale in any registration or revised registration submitted to the department. The manufacturer shall submit a revised registration prior to selling, or offering for sale, by any means in Connecticut, such brand of CED;

(iii) the manufacturer no longer sells or offers to sell by any means in Connecticut, a type of CED or brand of CED that the manufacturer has indicated it is selling or offering for sale in any registration or revised registration submitted to the department. The manufacturer shall submit any such revised registration not later than thirty (30) days after the manufacturer no longer sells, or offers to sell, by any means in Connecticut, a type of CED or brand of CED that the manufacturer has indicated it is selling or offering for sale in any registration or revised registration submitted to the department; or

(iv) any other information in any registration or revised registration submitted to the department is no longer accurate, or relevant information was omitted. A manufacturer shall submit such revised registration not later than thirty (30) days after the information is no longer accurate or the manufacturer knows or should have known that relevant information was omitted.

(B) There shall be no fee for the submission of a revised registration under this subdivision.

(4) Miscellaneous Registration Requirements.

(A) No manufacturer shall rely upon or utilize a registration submitted for a CED, or for a brand, that was submitted by another manufacturer.

(B) A manufacturer shall only be required to pay one initial registration fee prescribed in this subsection, even if such manufacturer has submitted an initial registration for one type of CED and later submits another initial registration for another type of CED.

(p) **Private Programs.** A manufacturer participating in or utilizing a private program shall:

(1) comply with the registration requirements in subsection (o) of this section, including, but not limited to, payment of any required fee;

(2) submit a written description of the private program with its annual registration. The written description shall include, at a minimum, as applied to the private program, the information specified in subparagraphs (C), (D), (E) (G), and if applicable, (K) and (L) of subsection (b)(3) of this section, and any other information specified in section 22a-631(e) of the Connecticut General Statutes. The written description shall also include a written certification attesting to whether all CEDs in the private program will be recycled or reused or refurbished in accordance with chapter 446n of the Connecticut General Statutes and this section. A manufacturer participating in or utilizing a private program shall remain responsible for ensuring that the recycling, reuse or refurbishment of all CEDs is done in compliance with

chapter 446n of the Connecticut General Statutes and this section. Whenever any information in the most recent written description submitted to the commissioner pursuant to this subdivision changes, or is inaccurate or misleading, or any relevant information was omitted, a manufacturer shall submit corrected or omitted information, in writing, to the commissioner not later than thirty (30) days after the information changes or is no longer accurate, or the manufacturer knows, or should have known, that relevant information was omitted; and

(3) comply with the reporting requirements in subsection (c)(7) of this section and provide any other information that a CER is or may be required to report or provide to the commissioner.

(q) **Returning CEDs to a Manufacturer.**

(1) A manufacturer may enter into a cooperative agreement with a CER under which CEDs, for the brands attributable to such manufacturer, are returned to the manufacturer or a facility designated by the manufacturer for recycling, reuse or refurbishment. A manufacturer of computers, monitors or printers, may also enter into a cooperative agreement with a CER under which such manufacturer's share of orphan devices, as determined pursuant to subsection (h) of this section, are returned to the manufacturer or a facility designated by the manufacturer for recycling, reuse or refurbishment. Absent a cooperative agreement, upon the written request of a manufacturer, provided reasonable advance notice has been provided, a CER shall make provisions for the separation and return to the manufacturer or a facility designated by the manufacturer for recycling, reuse or refurbishment, of CEDs for the brands attributable to a manufacturer. Absent a cooperative agreement, upon the written request of a manufacturer of computers, monitors or printers, provided reasonable advance notice has been provided, a CER shall make provisions for the separation and return to the manufacturer or a facility designated by the manufacturer, such manufacturer's share of orphan devices, as determined pursuant to subsection (h) of this section, for recycling, reuse or refurbishment. Under such an arrangement, the CER shall bill the manufacturer, as provided for in subsection (j) of this section.

(2) (A) Before CEDs are returned to a manufacturer pursuant to subdivision (1) of this subsection, the manufacturer shall submit to the commissioner a written description of how CEDs being returned will be recycled. This written description shall include, at a minimum, the information specified in subparagraphs (C), (D), (E), (G), and if applicable, (K) and (L) of subsection (b)(3) of this section and any other information specified in section 22a-631(e) of the Connecticut General Statutes. The written description shall also include a written certification attesting to whether all CEDs being returned to the manufacturer or a facility designated by the manufacturer, will be recycled, reused or refurbished in accordance with chapter 446n of the Connecticut General Statutes and this section. Before a CED is returned pursuant to subdivision (1) of this subsection, a CER shall determine the total weight of each type of CED (meaning the total weight of televisions, of computers, of monitors and of printers, each figured separately) returned to a manufacturer or a facility designated by a manufacturer and shall maintain a written record of the total weight of each type of CED.

(B) A manufacturer requesting that CEDs be returned to it, or to a facility it has designated, pursuant to this subsection shall remain responsible for ensuring that all CEDs are recycled, reused or refurbished in compliance with the requirements of chapter 446n of the Connecticut General Statutes and this section. Whenever any information in the most recent written description submitted to the commissioner

pursuant to this subdivision changes, or is inaccurate or misleading, or any relevant information was omitted, a manufacturer shall submit corrected or omitted information, in writing, to the commissioner not later than thirty (30) days after the information changes or is no longer accurate, or the manufacturer knows, or should have known, that relevant information was omitted.

(r) **Severability**. If any section, subsection, subdivision, subparagraph, clause, subclause, phrase, word or provision of this section shall be adjudged invalid or held unconstitutional, any such final judgment shall not affect the validity of this section as a whole or any part of provision hereof other than the part so adjudged to be invalid or unconstitutional.

(Adopted effective June 1, 2010; amended October 9, 2012)