INTEROFFICE/INTERDEPARTMENT MESSAGE

TO: Peter Bartucca Title: 10/3/89 Agency: Secretary of the State 30 Trinity Street, Hartford

FROM: Phil Florkoski DEP Air Compliance

Prin. Env. Analyst Phone: 5024 State Office Building Room 163

SUBJECT: Attached Regulations Re: Abatement of Air Pollution

In accordance with the provisions of section 4-172 CGS enclosed you will find the original and one copy of amendments to the Department of Environmental Protection's regulations concerning Abatement of Air Pollution. This section 2 and 3 of this amendment were approved by the Legislative Regulations Review Committee on September 19, 1989 (see attached letter). Call me if there are any questions.

State of Connecticut

GENERAL ASSEMBLY



LEGISLATIVE REGULATION REVIEW COMMITTEE LEGISLATIVE OFFICE BUILDING STATE CAPITOL ROOM 1800 September 19, 1989 HARTFORD, CONNECTICUT 06106 TELEPHONE: 240-0580

Leslie Carothers, Commissioner Department of Environmental Protection 165 Capitol Avenue Hartford, Connecticut

Re: Proposed Regulation 89-101 "Abatement of Air Pollution - Control of Volatile Organic Compounds" (Section 22a-174-20 of the Regulations of Connecticut State Agencies is amended) Submitted to the Legislative Regulation Review Committee on September 5, 1989 - Bearing a November 9, 1989 Deadline Date for Committee Action.

Commissioner Carothers:

www.comescological.comescological

The captioned regulation was Approved in Part by the Legislative Regulation Review Committee on September 19, 1989. Section 1, pages 1 to 46, inclusive, was Rejected Without Prejudice and Sections 2 and 3 were Approved.

Because of the comments the refinishers raised about the regulation. The committee requests that section 1 be resubmitted for action at the October 17, 1989 meeting.

Enclosed is the "original" for the regulation, which should be filled with the Office of the Seceretary of the State without section 1. Section 1 should be resubmitted with a summary of the changes.

Sincerely,

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Ruth A. Goodrich, Administrator

Enc.

REPORT ON REGULATION NO. 89-101

AGENCY: Department of Environmental Protection

SUBJECT MATTER: Abatement of Air Pollution-Control of Volatile Organic Compounds

STATUTORY AUTHORITY: 22a-174 (copy attached) Mandatory Federal Requirement X

Permissive Federal Funds X

Correct form and numbering: Yes X No

COMMENTS:

The proposed regulations are within the scope of the commissioner of environmental protection's authority under Section 22a-174 which authorizes regulations to "control and prohibit air pollution." However the following technical changes should be made:

Page 1 - in subparagraph (<u>iii</u>), the internal reference to "(iii)" should be bracketed and "(<u>ii</u>)" inserted; and the lettering of the remaining subparagraphs corrected to read as follows: [(vi)] (v) Rim vents, etc., [(vii)] (vi) Any emergency, etc."

-- in subdivision (a)(3), in the last line, "subsection" should be bracketed and "SUBDIVISION" inserted.

Page 5 - the colon in (b)(i) should be bracketed. -- the letters (A) and (B) should be underscored to show they are new.

Page 6 - in (b)(6) in line 7, there is an extra "A".

Page 8 - in (b) (14)(C) "subsection" should be bracketed and "SUBDIVISION" inserted.

Page 12 - in (i)(2), there is a bracket missing after "[(i)"

Page 39 - in next to last line, the comma after "REQUEST" should be deleted.

Page 51 - in line 4 of (D), the word "IF" is redundant and should be deleted.

RECOMMENDATION:

X Approval in whole with and technical changes Disapproval in whole or in part Rejection without prejudice in whole or in part Reviewed by: Catherine R. Bernstein/NLK Date: August 25, 1989

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reference to Sec. 14-100c with substance to Sec. 14-164c.

Sec. 22a-172. (Formerly Sec. 19-507a). Consultation by commissioner with other state officials. The commissioner of transportation and the commissioner of economic development shall consult with the commissioner on plans for the location of highways and for industrial development with respect to the effect of such plans on the incidence of air pollution in the state.

(1969, P.A. 758, S. 5; P.A. 77-614, S. 284, 587, 610; P.A. 78-303, S. 85, 136; P.A. 80-483, S. 83, 186.)

History: P.A. 77-614 and P.A. 78-303 replaced commissioner of community effairs with commissioner of economic development, effective January 1, 1979; P.A. 80-483 deleted chairman of Connecticut development commission as consultant; Sec. 19-507a transferred to Sec. 22a-172 in 1983.

Sec. 22a-173. (Formerly Sec. 19-507c). Insured mortgage payments on new equipment used for air pollution control. The Connecticut development authority may, upon application of the proposed mortgagee, insure and make advance commitments to insure mortgage payments required by a first mortgage on new machinery, equipment and buildings for the primary purpose of reducing, controlling or eliminating air pollution, certified as approved for such purpose by the commissioner of environmental protection, upon such terms and conditions as the Connecticut development authority may prescribe in accordance with the provisions of chapter 579.

(1969, P.A. 758, S. 21; 1971, P.A. 872, S. 15; P.A. 74-338, S. 49, 94.)

History: 1971 act replaced clean air commission with commissioner of environmental protection; P.A. 74-338 septaced Connecticut development commission with Connecticut development authority; Sec. 19-507c transferred to Sec. 22a-173 in 1983.

Sec. 22a-174. (Formerly Sec. 19-508). Powers of the commissioner. Regulations. Fees. Exemptions. (a) The commissioner, in the manner provided in subdivision (1) of section 22a-6, shall have the power to formulate, adopt, amend and repeal regulations to control and prohibit air pollution throughout the state or in such areas of the state as are affected thereby, which regulations shall be consistent with the Federal Air Pollution Control Act and which qualify the state and its municipalities for available federal grants. Any person heard at the public hearing on any such regulation shall be given written notice of the determination of the commissioner.

(b) The commissioner shall have the power to employ technical consultants for special studies, advice and assistance; to consult with and advise and exchange information with other departments or agencies of the state.

(c) The commissioner shall have the power, in accordance with regulations adopted by him, (1) to require that a person, before undertaking the construction, installation, enlargement or establishment of a new air contaminant source specified in the regulations adopted under subsection (a), submit to him plans, specifications and such information as he doems reasonably necessary relating to the construction, installation, enlargement, or establishment of such new air contaminant source; (2) to issue a permit approving such plans and specifications and permitting the construction, installation, enlargement or establishment of the new air contaminant source in accordance with such plans, or to issue an order requiring that such plans and specifications be modified as a condition to his approving them and issuing a permit allowing such construction, installation, enlargement or establishment in accordance therewith, or to issue an order rejecting such plans and specifications and prohibiting construction, installation, enlargement of a new air contaminant source in accordance with the plans and specifications and prohibiting construction, installation, enlargement of a new air contaminant source in accordance with the plans and specifications and prohibiting construction, installation, enlargement of a new air contaminant source in accordance with the plans and specifications submitted; (3) to require periodic inspection and maintenance of combustion equipment and other sources of air pollution; (4)

to require any person to maintain such records relating to air pollution or to the operation of facilities designed to abate air pollution as he deems necessary to carry out the provisions of this chapter and section 14-164c; (5) to require that a person in control of an air contaminant source specified in the regulations adopted under subsection (a), obtain a permit to operate such source if the source (A) is subject to any regulations adopted by the commissioner concerning high risk hazardous air pollutants, (B) burns waste oil, (C) is allowed by the commissioner, pursuant to regulations adopted under subsection (a), to exceed emission limits for sulfur compounds, (D) is issued an order pursuant to section 22a-178 to correct a violation of a regulation or (E) violates a regulation; (6) to require that a person in control of an air contaminant source who is not required to obtain a permit pursuant to this subsection register with him and provide such information as he deems necessary to maintain his inventory of air pollution sources. The commissioner may require renewal of such registration at intervals he deems necessary to maintain such inventory.

(d) The commissioner shall have all incidental powers necessary to carry out the purposes of this chapter and section 14-164c.

(c) As used in this subsection, "contiguous" means abutting or adjoining without consideration of the actual or projected existence of roadways, walkways, plazas, parks or other minor intervening features; "indirect source" means any building, structure, facility, installation or combination thereof, that has or leads to associated activity as a result of which any air pollutant is or may be emitted. The commissioner shall not require the submission of plans and specifications under indirect source regulations adopted pursuant to subdivisions (1) and (2) of subsection (c) of this section for proposed construction to be undertaken within a redevelopment area or urban renewal project, as defined in chapter 130, provided (1) the proposed construction is pursuant to a plan for such redevelopment area or urban renewal project adopted pursuant to section 8-127 prior to October 1, 1974, or to a modification of such plan, (2) the proposed construction is part of a contiguous, single purpose or multipurpose development or developments and (3) site clearance or construction had commenced on a portion of the site of such development or developments prior to October 1, 1974, nor shall the commissioner issue any order pursuant to subdivision (1) of subsection (c) of this section pertaining to the enforcement of indirect source regulations with respect to such proposed construction within such redevelopment areas and urban renewal projects. In the event that the modification of any such plan after October 1, 1974, would result in the proposed construction generating substantially more motor vehicle traffic than would have been generated prior to such modification, the submission of plans and specifications shall be required for such proposed modification. The commissioner shall not require the renewal of an indirect source operating permit issued in accordance with subsection (c) of this section unless such indirect source no longer conforms with plans, specifications or other information submitted to said commissioner in accordance with said subsection (c).

(f) The commissioner shall allow residents of any municipality, by permit, to burn brush on the property where they reside and he shall allow the burning of brush in municipal landfills, by permit to the fire marshal of the municipality where such landfill is located, except (1) when national or state ambient air quality standards may be exceeded; (2) where a hazardous health condition might be created; (3) when the forest fire danger in the area is identified as extreme and where woodland or grass land is within one hundred feet of the proposed burn; (4) where there is an advisory of any air pollution episode; (5) where prohibited by an ordinance of the municipality; and (6) in the case of a municipal landfill, when such landfill is within an area designated as a hot spot on the open burning map prepared by the commissioner. A permit for the burning of brush in any municipal landfill shall be issued no more than six times in any calendar year. The application by any fire marshal must be

ENVIRONMENTAL PROTECTION

submitted to the commissioner with the approval of the chief elected official of the municipality in which the municipal landfill is located. The commissioner shall approve or disapprove an application for the burning of brush in a municipal landfill, within a reasonable time of the filing of such application, and in accordance with the regulations pertaining to open burning adopted by the commissioner pursuant to subsection (a) of this section, provided the burning of leaves, demolition waste or other solid waste deposited in such landfill shall be prohibited.

(g) The commissioner shall require, by regulations adopted in accordance with the provisions of chapter 54, the payment of a permit application fee sufficient to cover the reasonable costs of reviewing and acting upon an application for, and monitoring compliance with the terms and conditions of, any state or federal permit, license, order, certificate or approval required pursuant to this section.

(h) The commissioner may require, by regulations adopted in accordance with the provisions of chapter 54, payment of a fee by the owner or operator of a source of air pollution, sufficient to cover the reasonable cost of a visual test of an air pollution control device through the use of a dust compound in the detection of leaks in such device, or the monitoring of such test, provided such fee may not exceed the average cost to the department for the conduct or monitoring of such tests plus ten per cent of such average cost. All payments received by the commissioner pursuant to this subsection shall be deposited in the general fund and credited to the appropriations of the department of environmental protection in accordance with the provisions of section 4-86.

(i) Notwithstanding the provisions of subsections (g) and (h) of this section, no municipality shall be required to pay more than fifty per cent of any fee established by the commissioner pursuant to said subsections.

(1967, P.A. 754, S. 4; 1969, P.A. 758, S. 4; 1971, P.A. 872, S. 17; P.A. 75-453, S. 1, 2; P.A. 76-232, S. 1, 3; P.A. 77-252; 77-604, S. 16, 84; P.A. 79-177; P.A. 81-127, S. 1, 2; 81-385, S. 1, 2; P.A. 83-159, S. 2, 3; 83-555, S. 2; 83-587, S. 74, 96; P.A. 84-5, S. 1, 2; 84-120, S. 1; 84-546, S. 133, 173; P.A. 85-515, S. 2; 85-571, S. 15; P.A. 87-165; P.A. 88-122.)

History: 1969 act required that regulations be consistent with federal act and qualify state and municipalities for federal aid, changed effective date of regulations, amendments or repeals from sixty to thirty days ther publication, deleted provision power to administer onths, take testimony and issue subpocats and added Subace. (c) to (c) 1971 act replaced "commission", i.e. clean air commission, with "commissioner", i.e. commissioner of environmental protection, deleted Subace. (f): P.A. 76-453 added Subace. (e): P.A. 76-232 added Subace. (f): P.A. 77-453 added Subace. (e): P.A. 76-232 added Subace. (f): P.A. 77-453 added Subace. (e): P.A. 76-232 added Subace. (f): P.A. 77-5453 added Subace. (g): P.A. 76-232 added Subace. (f): P.A. 77-453 edded Subace. (g): P.A. 76-232 added Subace. (f): P.A. 77-5453 added Subace. (g): P.A. 76-232 added Subace. (f): P.A. 77-5453 added Subace. (g): P.A. 76-232 added Subace. (f): P.A. 77-5453 added Subace. (g): P.A. 78-79-77 added Subace. (g): P.A. 81-127 amended Subace. (e): P.A. 77-606 corrected reference to Soc. 22a-6 in Subace. (g): P.A. 81-127 amended Subace. (h) to add provisions re burning of brank is municipal landfills: P.A. 81-855 Subace. (g): P.A. 81-127 amended Subace. (h) add provisions re burning of brank is municipal landfills: P.A. 81-856 added Subace. (h) allowing the commissioner to require payment of a fee by the operator of a source of air pollution to be applicable for my visual test of an air pollution control device conducted or monitored by the department; Sac. 19-508 transferred to Sac. 22a-174 in 1983; P.A. 83-159 amended Subace. (g) to unthorize increasing fast the visual test fas arefue the sourt the actual cost; P.A. 83-555 amended Subace. (c) memoiring fast by amount sufficient to cover the cost of monitoring compliance with the arms of a state or fueleral permit; P.A. 84-557 amde a technical amendment to Subace. (c): P.A. 84-53 amended Subace. (f) water cost of a subcer to all formations and permiting the subace. (c) and (d), substate. Subace. (c

Annotation to former section 19-508: Cired. 36 CS 74, 77, 88. Annotations to present section: Subsec. (c): Cired. 192 C. 991, 595. STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



August 10, 1989

Honorable Clarine Nardi Riddle Acting Attorney General 55 Elm Street Hartford, CT 06106

Dear Attorney General Riddle:

Pursuant to Section 4-169 of the Connecticut General Statutes, I submit for your consideration and approval the enclosed amendment to the Regulations of Connecticut State Agencies. Notice of intent to amend this regulation was published in the Connecticut Law Journal on May 30, 1989. A copy of the notice is enclosed with this proposed regulation.

This amendment consists of three parts. The first part amends the Regulations of Connecticut State Agencies concerning Abatement of Air Pollution for volatile organic compounds 22a-174-20). (section These amendments include necessary definitions, applicability and exemption levels, record keeping and reporting requirements and averaging time periods. The purpose of this action is to ensure that Connecticut's programs are consistent with standard guidelines as required by the U.S. Environmental Protection Agency (EPA) under the Clean Air Act. The second part (see page 46) amends subdivision 22a-174-3(k)(7) to clarify the requirements for monitoring of air quality by sources seeking permits to construct. The third part (see page 54) adopts the EPA definition of "begin actual construction" and amends the definition of "volatile organic compound" to be consistent with the EPA definition.

If there are any questions on this proposal, please feel free to contact Phil Florkoski at 566-5024. Thank you for your assistance.

Sincerely,

Caultus

Leslie Carothers Commissioner

LAC/F/pf

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



August 10, 1989

Legislative Regulations Review Committee Legislative Office Building Capitol Avenue Hartford, CT 06106

Ladies and Gentlemen:

The purpose of this letter is to request that your Committee provide early consideration for certain regulations concerning abatement of air pollution at your meeting of August 15, 1989. This will allow your Committee to review and approve these regulations at your meeting of September 19, 1989. Enclosed with this request are three copies of the final regulations which have been submitted to the Attorney General as required by section 4-169 of the General Statutes. Prior to your meeting of September 19, 1989 all the materials required pursuant to Section 4-170 of the General Statutes will be submitted. This will include the proposed amendment to the Regulations of Connecticut State Agencies, a copy of the notice of intent to amend, a fiscal note and summary of the comments received at the public hearing.

This amendment consists of three parts. The first part amends the Regulations of Connecticut State Agencies concerning Abatement of Air Pollution for volatile organic compounds (section 22a-174-20). These amendments include necessarv definitions. applicability and exemption levels, record keeping and reporting requirements and averaging time periods. Thepurpose of this action is to ensure that Connecticut's programs are consistent with standard guidelines developed by the U.S. Environmental Protection Agency (EPA) under the Clean Air Act. The second part (see page 46) amends subdivision 22a-174-3(k)(7)to clarify the requirements for monitoring of air quality by sources seeking permits to construct. The third part (see page 54) adopts the EPA definition of "begin actual construction" and amends the definition of "volatile organic compound" to be consistent with the EPA definition. The change to the definition of "volatile organic compound" has the additional advantage of promoting the Montreal Protocol for the reduction of chlorofluorocarbons and EPA's final rule for "Protection of Strastospheric Ozone".

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Legislative Regulations Review Committee August 10, 1989 Leslie A. Carothers

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There are three reasons why early consideration is requested. The first is that after your approval of these regulations, they will be submitted to the U.S. Environmental Protection Agency as part of the State Implementation Plan for air Quality. Since the definitions are being amended to be consistent with the federal definitions, sources regulated under these regulations will face different standards at the State and Federal levels until these regulations are approved. It is important that these differences be eliminated as soon as possible. The second reason for requesting action at the September meeting is to allow the Department to meet requirements which were placed in our Federal Grant for this year. Your approval will allow the Department to meet our commitments before the end of the Federal fiscal year. Finally, the adoption of this regulation at this earlier date will assist in meeting the deadlines contained within the Montreal Protocol.

Thank you for your consideration and assistance in this matter. If there are any questions on this proposal, please feel free to contact Michael Sullivan at 566-4017. Thank you for your assistance.

Sincerely,

Julie Can Huis

Leslie Carothers Commissioner

LAC/F/pf

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IMPORTANT: Read Instructions on bottom of Certification Page before completing this form. Failure to comply with instructions may cause disapproval of proposed Regulations.

STATE OF CONNECTICUT REGULATION

OF

<u>Department of Environmental Protection</u>

Concerning

SUBJECT MATTER OF REGULATION

Abatement of Air Pollution - Control of Volatile Organic Compounds

SECTION 1

Section 22a-174-20 of the Regulations of Connecticut State Agencies is amended to read as follows:

(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.

"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

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SECTION _____

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 [following] 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 [of equal] WITH AN efficiency EQUAL TO THAT REQUIRED UNDER SUBPARAGRAPH <u>22a-174-20(a)(2)(B)</u> 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) [There are no visible holes, tears or other openings in any seal fabric;
- (ii)] Any seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;

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[(iii)] (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;

- [(iv)] (iii) A secondary closure seal gap measurement as specified in (iii) above is made annually;
- [(v)] (iv) A visual inspection of the secondary closure seal is conducted semi-annually;
- [(vi) Rim vents are set to open when the roof is on the roof leg supports; and

[(vii)] (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 subsection 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 Sampling of Petroleum and Petroleum Products"; or
- (C) ASTM Method D270 "Standard Method of Sampling of Petroleum and Petroleum Products".

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Department of Environmental Protection

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SECTION 1

- (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
 - (111) 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 <u>"volatile organic</u> compounds."

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(b)(1) 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

- [(i)] (A) The vapors discharged from the <u>"delivery vehicle"</u> during loading are processed by a <u>"vapor recovery</u> system<u>"</u>; and
- [(ii)] (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(c) AND PART 60.503(e), RESPECTIVELY SHALL BE USED.

(b)(2) 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 "tank," truck, or trailer, 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.

(b)(3) Subdivisions (b)(1) and (b)(2) 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 (1) AND (2) OF THIS SUBSECTION SHALL BE BASED UPON A THIRTY DAY ROLLING AVERAGE AND ONCE A PREMISE HAS EXCEEDED THIS LIMIT, THE REQUIREMENTS OF SUBDIVISIONS (1) AND (2) OF THIS SUBSECTION SHALL ALWAYS APPLY. "Loading facility", for the purpose of this subsection, shall mean any aggregation or combination of organic liquid loading equipment which is [both (i)] possessed by one "person" [and (ii) located so that all the organic liquid loading outlets for such aggregation or combination of loading equipment can be encompassed within any circle of three hundred (300) feet in diameter].

(b)(4) After April 1, 1982, no "person" shall [load or permit the loading of] TRANSFER OR ALLOW THE TRANSFER OF gasoline [into] 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 [loading] TRANSFER takes place through a "submerged fill pipe" and a "vapor balance system"

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is used. THE THROUGHPUT OF A LOADING FACILITY SHALL BE BASED UPON A THIRTY DAY ROLLING AVERAGE AND ONCE A A LOADING FACILITY HAS EXCEEDED THIS LIMIT, THE REQUIREMENTS OF THIS SUBDIVISION SHALL ALWAYS APPLY.

(b)(5) 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 [an annual] A "throughput" of [one hundred twenty thousand (120,000)] 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 PREMISE HAS EXCEEDED THIS LIMIT, THE REQUIREMENTS OF THIS SUBDIVISION SHALL ALWAYS APPLY.

(b)(6) 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 [an annual] A throughput of [one hundred twenty thousand (120,000)] 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 A LOADING FACILITY HAS EXCEEDED THIS LIMIT, THE REQUIREMENTS OF THIS SUBDIVISION SHALL ALWAYS APPLY.

(b)(7) 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 (b)(5) [and] OR (b)(6) unless [the transfer is made through]:

- [(i)] (A) THE TRANSFER IS MADE THROUGH a properly maintained and operated "approved control system" WHICH IS IN GOOD WORKING ORDER, CONNECTED AND OPERATING; and
- [(ii)] (B) [piping, valves, fittings, and connections on the delivery vehicle so that the rated collection efficiency of the control system is attained for any transfer] THERE ARE NO LEAKS IN THE TANK TRUCKS' OR TRAILERS' PRESSURE/VACUUM RELIEF VALVES AND HATCH COVERS, NOR IN THE TRUCK TANKS, STORAGE TANK OR ASSOCIATED VAPOR AND LIQUID LINES DURING LOADING OR UNLOADING.

(b)(8) 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.

(b)(9) The owner or <u>"operator"</u> of a <u>"delivery vehicle"</u> shall ensure that:

- [(i)] (A) The delivery vehicle is designed and maintained to be vapor-tight at all times; and,
 - [(ii)](B) The hatches are closed at all times during loading AND UNLOADING operations; and,

[(iii)] (C) The pressure relief values are set to release at no less than 0.7 pounds per square inch; and

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[(iv)] (D) The vapor laden "delivery vehicle" is refilled only at facilities which meet the requirements of subdivisions (b)(1) or (b)(4).

(b)(10) The "Commissioner" may provide an exemption to the provisions of subdivisions (b)($\overline{4}$) or (b)(5) for economic or technological impracticability. ANY EXEMPTION GRANTED UNDER THIS SUBDIVISION SHALL REQUIRE THE APPROVAL OF THE "ADMINISTRATOR".

(b)(11) [(A)] On and after July 1, 1985, no person who owns or operates a tank truck that receives gasoline from a loading facility described in [subsections (b)(1) or (b)(2)] SUBDIVISIONS (b)(1) OR (b)(4) of this section or delivers gasoline to a "dispensing facility" subject to the provisions of [subsections] SUBDIVISIONS (b)(5) or (b)(6) of this section OR ANY LOADING FACILITY SUBJECT TO SUBDIVISION (b)(4) OF THIS SECTION shall cause or permit the tank truck to load or unload gasoline unless:

- [(i)(1)] (A) during the preceding period of January 1 to June 30, the tank was tested in accordance with Method 27 as [specified in the Federal Register of August 18, 1983 on page 37597 (48 FR 37597)] FOUND AT APPENDIX A OF TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 or another manner ACCEPTED BY THE "ADMINISTRATOR" AND approved by the Commissioner in [writing] ACCORDANCE WITH SECTION 22a-174-5; or
- [(2)] (B) the tank has been tested in accordance with the requirements of Massachusetts, New Jersey or New York within the preceding twelve months; and
- [(ii)] (C) during the test specified in [(i)] (A) OR (B) above, 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
- [(iii)] (D) the tank truck 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 the State in which the tank was tested.

 $[(B)](\underline{b})(\underline{12})$ The owner or operator of any tank truck which fails to meet the requirements of subdivision (b)(11) [(A)(ii)] above or $[(b)(\underline{11})(D)(\underline{ii})]$ SUBDIVISION (b)(14) below shall repair and retest the tank truck within fifteen (15) days.

[(C)](b)(13) Any person who performs a test required by [subsection] SUBDIVISION (b)(11) of this section shall:

- [(i)] (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
- [(ii)](B) submit a copy of the test report to the "Commissioner" within ten (10) days after performing a test.

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[(D)](b)(14) The owner or operator of any tank truck subject to the provisions of [subsection] SUBDIVISION (b)(11) of this section shall ensure that:

- [(i)] (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;
- [(ii)](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

[(iii)]

(C) records of all tests performed under subsection (b)(11) of this section are maintained for a minimum of two (2) years.

(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 SHALL 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 gas-tight 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 <u>95</u> PER CENT BY WEIGHT.
- A container having other equipment of equal efficiency for purposes 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

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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.

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(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 degrees F. (704 degrees C) for 0.3 second or greater in a direct-flame after-burner 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 the "emission" of organic gases from a vapor blowdown system or emergency relief unless these gases are burned by smokeless "flares" or an equally effective control device as approved by the "Commissioner." Exemptions 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, exemptions 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 <u>"person"</u> 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 said 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 subsection (f)(1), for employing or applying any HIGHLY photochemically reactive solvent, as defined in subdivision (i)(1) OR (i)(2) OF THIS SECTION [and photochemically reactive solvent,] 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 subdivision are included in determining compliance with this subdivision. "Emissions" resulting from baking, heatcuring, 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 8-394 REV. 1/77

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subdivision shall be collectively subject to compliance with this subdivision.

(f)(3) [Reserved]

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(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 [nonphotochemically reactive] organic solvent or any materials 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 heatpolymerizing 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 shall be 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:

- [(i)] (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 [.] ;
- [(ii)](B) Adsorption, PROVIDED THAT ORGANIC EMISSIONS ARE REDUCED BY 90 PERCENT OR MORE EACH HOUR ; or

/[(iii)] (C)

A system demonstrated to have control efficiency equivalent to or greater than the above and approved by the <u>"Commissioner"</u> BY PERMIT OR ORDER.

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(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.

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(f)(9) The provisions of subsection (f) shall not apply to:

- [(i)] (A) The use of equipment for which other requirements are specified by subsections 22a-174-20 (a) through (e) inclusive, [and] subsections [(m)] 22a-174-20(k) through [(v)] (y) inclusive or FOR WHICH "REASONABLY AVAILABLE CONTROL TECHNOLOGY" IS REQUIRED BY SUBSECTION 22a-174-20(ee) [which are exempt from air pollution control requirements under those subsections] .
- [(ii)](B) The spraying or other employment of insecticides, pesticides, or herbicides.

[(iii)]

(C) The <u>"emission</u> of <u>"organic compounds</u> from coating operations where the <u>"VOLATILE organic compound</u> portion of the coating solvent is 20 percent or less by weight.

(f)(10) [(i)] 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.

[(ii)]

(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 degrees F. [at 0.5 millimeters mercury absolute pressure] UNDER STANDARD CONDITIONS or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 220 degrees F.

[(iii)]

(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.

[(iv)]

(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 [unreactive] REACTIVE solvent shall be considered 100 percent reduction of the HIGHLY photochemically reactive "emissions" involved.

[(v)]

(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) <u>"Architectural coatings."</u>

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(g)(1) On or after January 1, 1974, no "person" shall sell or offer for sale to the final user in containers greater than 1-quart (0.95 liter) capacity any "architectural coating" or solvent for the purpose of thinning or diluting any "architectural coating" unless the solvent composition is NONHIGHLY photochemically [unreactive] REACTIVE, as defined in subdivision (i)(4) OF THIS SECTION.

(g)(2) On or after January 1, 1975, no "person" shall employ, apply, evaporate, or dry any "architectural coating" purchased in containers of greater than 1-quart (0.95 liter) capacity unless the solvent composition is NONHIGHLY photochemically [unreactive] REACTIVE, as defined in subdivision (i)(4) OF THIS SECTION.

(g)(3) On or after January 1, 1975, no "person" shall thin or dilute for application any "architectural coating" with a HIGHLY photochemically reactive solvent, as defined in subdivisions (i)(1) and (i)(2) OF THIS SECTION, purchased in containers of greater than 1-quart (0.95 liter) capacity.

(h) Exemptions. If the "Commissioner" determines that NONHIGHLY photochemically [unreactive] REACTIVE solvents are not available for a particular application or class of applications, THEN THE COMMISSIONER [he] 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:

- [(i)] (A) Group R1: Any hydrocarbons, alcohols; aldehydes, esters, ethers, or ketones, having an olefinic or cycloolefinic type of unsaturation.
- [(ii)] (B) Group R2: Any aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene, phenyl acetate, and methyl benzoate.
- [(iii) (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 such mixture exceeds any of the following limits by volume:

- [(i) (A) 5 percent of any combination of chemical compounds in group R1.
- [(ii)](B) 8 percent of any combination of chemical compounds in group R2.

[(iii)]

(C) 20 percent of any combination of chemical compounds in group R3.

[(iv)](D) 20 percent of any combination of chemical compounds in groups R1, R2, and R3.

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(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 [nonreactive] 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 [organic solvent] VOLATILE ORGANIC COMPOUND or of any material containing more than one and one-half gallons (5.7 liters) of any such [organic solvent] VOLATILE ORGANIC COMPOUND by any means which will permit the evaporation of such solvent into the atmosphere.

(k) Restrictions on cutback asphalt.

(k)(1) Definitions as used in this subsection:

"Asphalt" means a dark-brown cementitious material which is solid, semisolid, or liquid in consistency and in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.

"Class 8 Bituminous Concrete" means material specified as Class 8 Bituminous Concrete in the most current version of the state of Connecticut, Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction".

"Cutback Asphalt" means asphalt which has been liquefied by blending with more than seven percent "organic compounds" by volume AS DETERMINED BY AMERICAN SOCIETY FOR TESTING AND MATERIALS' DISTILLATION TEST D-244.

"Medium-Curing Cutback Asphalt" means the material which meets the specifications of the American Society for Testing and Materials Designation D 2028.

"Penetrating Prime Coat" means an application of low-viscosity liquid asphalt to an absorbent surface which is used to prepare an untreated base prior to the application of an asphalt surface.

(k)(2) After October 1, 1985 no "person" shall store, use or apply cutback asphalt during the months of June, July, August and September unless less than five percent (5%) of the total solvent contained in such cutback asphalt evaporates at a temperature up to and including five hundred degrees Fahrenheit (500° F) as determined by ASTM Method D-402, except that:

- (A) Medium-Curing Cutback Asphalt may be used solely as a penetrating prime coat for aggregate bases prior to paving.
- (B) Medium-Curing Cutback Asphalt may be used for the manufacture of materials for long-period storage or stockpiling of patching mixes used in pavement maintenance.

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(C) Class 8 Bituminous Concrete may be used at any time for surface treatments under one inch, for crack filling, relief joints, minor leveling or pothole patching.

(1) Metal cleaning.

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(1)(1) Definitions. For the purpose of this subsection:

"Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing or immersion while maintaining the degreasing solvent below its boiling point. Wipe cleaning is not included in this definition.

"Conveyorized degreasing" means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized degreasing solvents.

"Degreasing solvent" means any "volatile organic compound" used for metal cleaning.

"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.

"Freeboard ratio" means the freeboard height divided by the [width of the degreaser] SMALLER INTERIOR DIMENSION (LENGTH, WIDTH OR DIAMETER) OF THE DEGREASER.

"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.

"Metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

"REFRIGERATED CHILLER" MEANS A DEVICE WHICH IS MOUNTED ABOVE THE WATER JACKET AND THE PRIMARY CONDENSER COILS, CONSISTING 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 THIRTY (30) PERCENT OF THE SOLVENT'S BOILING POINT IN DEGREES FAHRENHEIT.

(1)(2) The provisions of this subsection apply with the following exceptions.

[(i)](A) Open top vapor degreasers with an open area smaller than one (1) square meter (10.8 square feet) are exempt from the provisions OF PARTS (ii), (iv) AND (v) of subparagraph [(1)(4)(iii)] (1)(4)(C) OF THIS SECTION;

[(ii)]

(B) Conveyorized degreasers with [an air/vapor] A SOLVENT/AIR interface smaller than two (2) square meters (21.6 square

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feet) are exempt from the provisions of subparagraph [(1)(5)(1)] (1)(5)(A);

[iii) Metal cleaning equipment in operation prior to July 1, 1980 which meets the requirements of subsection (f) is exempt from the provisions of subdivisions (1)(4) and (1)(5);

(iv)]

(C) Metal cleaning equipment which uses 1,1,1 trichloroethane, methylene-chloride, or trichlorotrifluoroethane [;] .

[(v) Cold cleaning equipment which is used in a licensed automobile repair facility is exempt from the provisions of subdivision (1)(3).]

(1)(3) [After] BETWEEN July 1, 1980 AND JULY 1, 1990 the owner or "operator" of [a] ANY cold cleaning [facility] UNIT shall [:] MEET THE REQUIREMENTS OF SUBPARAGRAPHS (A) THROUGH (F) OF THIS SUBDIVISION. AFTER JULY 1, 1990 THE OWNER OR "OPERATOR" OF ANY COLD CLEANING UNIT SHALL MEET THE REQUIREMENTS OF SUBPARAGRAPHS (A) THROUGH (K) OF THIS SUBDIVISION.

- [(i)](A) Equip the [cleaner] CLEANING DEVICE with a cover designed so that it can be easily operated with one hand [; and]. [(ii)]
 - (B) Equip the [cleaner] CLEANING DEVICE with a facility for draining cleaned parts constructed internally so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system [; and,].
- [(iii)]
 - (C) Store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, in a manner such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere [;and,].
- [(iv)]
 - (D) Close the cover whenever parts are not being handled in the cleaner FOR TWO (2) MINUTES OR MORE, OR WHEN THE DEVICE IS NOT IN USE [; and,].
- [(v)]

(E) Drain the cleaned parts for at least 15 seconds or until dripping ceases, WHICHEVER IS LONGER[;and,].

- [(vi)]
 - (F) If used, supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure which does not [cause excessive splashing] EXCEED TEN (10) POUNDS PER SQUARE INCH AS MEASURED AT THE PUMP OUTLET AND PERFORM SUCH SPRAYING WITHIN THE CONFINES OF THE COLD CLEANING UNIT.

[(vii)]

(G) INSTALL ONE OF THE FOLLOWING CONTROL DEVICES IF THE SOLVENT VAPOR PRESSURE IS GREATER THAN 4.3 KILO PASCALS (33 MILLIMETERS OF MERCURY OR 0.6 POUNDS PER SQUARE INCH) MEASURED AT 38 DEGREES CELSIUS (100 DEGREES FAHRENHEIT) OR IF THE SOLVENT IS HEATED ABOVE 50 DEGREES CELSIUS (120 DEGREES FAHRENHEIT):

(1) FREEBOARD THAT GIVES A FREEBOARD RATIO GREATER THAN OR EQUAL TO 0.7; OR

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- (11) WATER COVER (SOLVENT MUST BE INSOLUABLE IN AND HEAVIER THAN WATER); OR
- (111) OTHER SYSTEMS OF EQUIVALENT CONTROL, EQUAL TO THAT OF A "REFRIGERATED CHILLER" OR CARBON ADSORPTION APPROVED BY THE COMMISSIONER BY PERMIT OR ORDER.
- (H) 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 1 AND 2 METERS UPWIND, AND AT THE SAME ELEVATION AS THE TANK LIP.
- (1) DO NOT OPERATE THE UNIT UPON THE OCCURRENCE OF ANY VISIBLE SOLVENT LEAK UNTIL SUCH LEAK IS REPAIRED.
- (J) PROVIDE A PERMANENT, CONSPICUOUS LABEL ON OR POSTED NEAR EACH UNIT SUMMARIZING THE APPLICABLE OPERATING . REQUIREMENTS.

(1)(4) [After] BETWEEN July 1, 1980 AND JULY 1, 1990 the owner or "operator" of [an] ANY open top vapor degreaser shall [:] MEET THE REQUIREMENTS OF SUBPARAGRAPHS (A) THROUGH (E) OF THIS SUBDIVISION. AFTER JULY 1, 1990 THE OWNER OR "OPERATOR" OF ANY OPEN TOP VAPOR DEGREASER SHALL MEET THE REQUIREMENTS OF SUBPARAGRAPHS (A) THROUGH (P) OF THIS SUBDIVISION.

[(i)]

(A) Equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone [; and,].

- [(ii)]
 - (B) Provide the following safety switches:
- [(a)] (i) A condenser flow switch and [thermostat] DEVICE which [shut] SHUTS off the SUMP heat if the condenser coolant is [either] not circulating or [is too warm] IF THE VAPOR LEVEL RISES ABOVE THE HEIGHT OF THE PRIMARY CONDENSER; and [,]
- [(b)] (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 [; and,].

[(iii)]
 (C) Install one of the following control devices:

[(a)] (1) 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); or [,]

[(b)] (<u>ii</u>) "Refrigerated chiller"; or [,]

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[(c)]

[(d)]

[(e)]

[(iv)]

- (iii) Enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser);or [,]
- (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 [air/vapor] SOLVENT/VAPOR area (when cover is open), and exhausting less than 25 parts per million of degreasing solvent averaged [over one] EACH complete adsorption cycle; or
- (v) A control system, demonstrated to have control efficiency equivalent to or greater than [any] THAT REQUIRED of the CARBON ADSORPTION SYSTEM REQUIRED IN THIS SUBPARAGRAPH [above, and] WHICH IS approved by the "Commissioner" BY PERMIT OR ORDER. [; and,]
- (D) Keep the cover closed at all times except when processing work loads through the degreaser[;and,].
- [(v)]
 (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; AND
 - (11) MOVING PARTS IN AND OUT OF THE DEGREASING UNIT AT LESS THAN 3.3 METERS PER MINUTE (11 FEET PER MINUTE); AND
 - (iii) HOLDING THE PARTS IN THE VAPOR ZONE AT LEAST THIRTY (30) SECONDS OR UNTIL CONDENSATION CEASES, WHICHEVER IS LONGER; AND
 - (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.

 - (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.



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- (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; AND
- (M) DO NOT OPERATE THE UNIT UPON THE OCCURRENCE OF ANY VISIBLE SOLVENT LEAK UNTIL SUCH LEAK IS REPAIRED; AND
- (N) PROVIDE A PERMANENT, CONSPICUOUS LABEL ON OR POSTED NEAR EACH UNIT SUMMARIZING THE APPLICABLE OPERATING REQUIREMENTS.
- $(0) \qquad \text{MAINTAIN A MONTHLY RECORD OF THE AMOUNT OF SOLVENT ADDED TO} EACH UNIT AND KEEP SUCH RECORD FOR A MINIMUM OF TWO (2) YEARS AFTER SUCH RECORD IS MADE.$
- (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.

(1)(5) [After] BETWEEN July 1, 1980 AND JULY 1, 1990 the owner or "operator" of [a] ANY conveyorized degreaser shall [:] MEET THE REQUIREMENTS OF SUBPARAGRAPHS (A) THROUGH (G) OF THIS SUBDIVISION. AFTER JULY 1, 1990 THE OWNER OR "OPERATOR" OF ANY CONVEYORIZED DEGREASER SHALL MEET THE REQUIREMENTS OF SUBPARAGRAPHS (A) THROUGH (M) OF THIS SUBDIVISION.

[(i)](A) Install one of the following control devices:

- [(a)] (i) "Refrigerated chiller"; or
- [(b)] (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 [air/vapor] 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 [a] EACH complete adsorption cycle; or,
- [(c)] (iii) A system, demonstrated to have a control efficiency equivalent to or greater than the THAT REQUIRED of the CARBON ADSORPTION SYSTEM REQUIRED IN THIS SUBPARAGRAPH [above, and] WHICH IS approved by the "Commissioner" BY PERMIT OR ORDER [; and,].

[(ii)]

(B) Provide the following safety switches:

- [(a)]
- (i) A condenser flow switch and [thermostat] DEVICE which shuts off the SUMP heat if the condenser coolant is [either] not circulating or [too warm] IF THE VAPOR LEVEL RISES ABOVE THE HEIGHT OF THE PRIMARY COIL; and [,]

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[(b)]

(ii) A spray safety switch which 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 [; and,] .

[(iii)] (C)

(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 [; and].

[(iv)] $[(\mathbf{v})]$

(D) Rack parts [for best] TO ALLOW COMPLETE drainage[; and].

(E) Maintain conveyor speed at less than eleven (11) feet per minute [; and].

[(vi)]

(F) Use either a drying tunnel, rotating basket, or other equivalent method to prevent cleaned parts from carrying out solvent liquid [; and].

- [(vi)]
 - (G) Place covers over entrances and exits immediately [following] 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.
 - (1) 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.
 - $(\underline{M}) \qquad \underline{MAINTAIN A MONTHLY RECORD OF THE AMOUNT OF SOLVENT ADDED TO EACH UNIT AND KEEP SUCH RECORD FOR TWO (2) YEARS AFTER SUCH RECORD IS MADE.$
 - (m) Can coating.

[(m)](1) For the purpose of this subsection:

"End sealing compound" means a synthetic rubber compound which is coated on to can ends and which 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.

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"Interior base coating" means a coating applied by roller coater or spray to the [interior of a can] 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 [and] 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.

[(m)](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;

[(i)](A) 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations.

[(ii)]

- (B) 0.51 kilograms per liter of coating (4.2 pounds per gallon), excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, 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.
 [(iii)]
 - (C) 0.66 kilograms per liter of coating (5.5 pounds per gallon), excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to the coating applicator from three-piece can side-seam spray operations.

[(iv)]

(D) 0.44 kilograms per liter of coating (3.7 pounds per gallon), excluding water AND EXEMPT ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to the coating applicator from end sealing compound operations.

(3) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH HAS ACTUAL EMISSIONS OF FIFTEEN (15) POUNDS PER DAY OR MORE IN ANY ONE DAY FROM CAN COATING OPERATIONS. AFTER OCTOBER 1, 1989 ANY PREMISE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

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(n) Coil coating.

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[(n)](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.

[(n)](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 ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to the coating applicator from prime and topcoat or single coat operations.

(3) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH HAS ACTUAL EMISSIONS OF FIFTEEN (15) POUNDS PER DAY OR MORE IN ANY ONE DAY FROM COIL COATING OPERATIONS. AFTER OCTOBER 1, 1989 ANY PREMISE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(o) Fabric and vinyl coating.

[(o)](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 [topcoat,] COATING or printing on vinyl coated fabric or vinyl sheets.

[(0)](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;

 $[(i)](A) 0.35 \text{ kilograms per liter of coating (2.9 pounds per gallon), excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE <math>1(a)-1$ in SECTION 22a-174-1,

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delivered to the coating applicator from a fabric coating line.

[(ii)]

(3) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH 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 PREMISE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(p) Metal furniture coating

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[(p)](1) For the purpose of this section:

"Application area" means the area where the coating is applied by spraying, dipping, or flowcoating techniques.

"Metal furniture coating" means the surface coating of any furniture made of metal or any metal part which will be assembled with other metal, wood, fabric, plastic or glass parts to form a furniture piece.

[(p)](2) The owner or "operator" of a metal furniture coating line shall not cause or permit the discharge into the atmosphere of any "volatile organic compounds" FROM ANY COATING in excess of 0.36 kilograms per liter of coating (3.0 pounds per gallon), excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1in SECTION <u>22a-174-1</u>, delivered to the coating applicator from prime and topcoat or single coat operations.

(3) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH HAS ACTUAL EMISSIONS OF FIFTEEN (15) POUNDS PER DAY OR MORE IN ANY ONE DAY FROM METAL FURNITURE OPERATIONS. AFTER OCTOBER 1, 1989 ANY PREMISE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(q) Paper coating.

[(q)](1) For the purpose of this subsection:

"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. R-39A REV. 1/77

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"Paper coating" means coatings put on paper and pressure sensitive tapes regardless of substrate by knife, roll or rotogravure coating. Related web coating processes on plastic film and decorative, PROTECTIVE OR FUNCTIONAL coatings on metal foil are included in this definition.

"Roll coating" means the application of a coating material to a substrate ACROSS THE ENTIRE WIDTH OF A WEB 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.

[(q)](2) The owner or "operator" of a paper coating facility shall not cause or permit the discharge into the atmosphere of any "volatile organic compounds" FROM ANY COATING in excess of 0.35 kilograms per liter of coating (2.9 pounds per gallon), excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to the coating applicator from a paper coating line.

(3) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH HAS ACTUAL EMISSIONS OF FIFTEEN (15) POUNDS PER DAY OR MORE IN ANY ONE DAY FROM PAPER COATING OPERATIONS. AFTER OCTOBER 1, 1989 ANY PREMISE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(4) THE PROVISIONS OF THIS SUBSECTION DO NOT APPLY TO ANY COATING LINE WITH A CONTINUOUS WEB WHICH HAS BOTH PAPER COATING AND PRINTING STATIONS AND WHICH IS SUBJECT TO THE REQUIREMENTS OF SUBSECTION 22a-174-20(v).

(r) Wire coating.

[(r)](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.

[(r)](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 ON TABLE 1(a)-1in SECTION 22a-174-1, delivered to the coating applicator from wire coating operations.

(3) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH HAS ACTUAL EMISSIONS OF FIFTEEN (15) POUNDS PER DAY OR MORE IN ANY ONE DAY FROM WIRE COATING OPERATIONS. AFTER OCTOBER 1, 1989 ANY PREMISE WHICH IS OR BECOMES SUBJECT TO THE PROVISIONS OF THIS

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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

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[(s)](1) Definitions for the purpose of this subsection:

"Air dried coating" means coatings which are 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 [undercoat] SURFACE TO WHICH IT IS APPLIED as a reflectant base or undertone color[;].

"Coating application system" means all operations and equipment which applies, conveys, and dries a surface coating, including, but not limited to, spray booths, flow coaters, flashoff areas, air dryers and ovens[;].

"EXPOSURE TO [Extreme] EXTREME environmental conditions" means [,] exposure to: [any of;] 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 [harsh exposure or] "EXPOSURE TO extreme environmental conditions"[;] .

"Heat sensitive material" means materials which cannot consistently be exposed to temperature greater than 95 degrees C (203 degrees F) for more than 30 seconds[;].

["Low solvent coating" means coatings which contain 0.4 to 4.4 lbs. of solvent/gal. or 20% by weight or less. Low solvent coatings include water-borne, higher solids, electrodeposition and powder coatings;]

"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 which adheres to the metal surface during the application process, expressed as a percentage of the total volume of coating solids delivered by the applicator[;].

[(s)](2) Applicability. For the purpose of this subsection:

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"Miscellaneous metal parts and products" includes the following industrial categories [;] :

Large farm machinery (harvesting, fertilizing and planting machines, tractors, combines, etc.);

Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.);

Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.);

Commercial machinery (office equipment, computers and auxiliary equipment, typewriters, calculators, vending machines, etc.);

Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

Fabricated metal products (metal covered doors, frames, etc.); and

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).

The following categories are not included [;] :

automobiles and light duty trucks; metal cans; flat metal sheets and strips in the form of rolls or coils; plastic and glass objects;

- [small metal components having a lacquer surface less than 10
 square inches;] magnet wire for use in electrical machinery;
 metal furniture;
- [interior and] THE exterior SURFACE of [airplanes] ASSEMBLED AIRCRAFT; automobile refinishing; customized top coating of automobiles and trucks, if production is less than 5 vehicles per day; and THE exterior SURFACE of ASSEMBLED marine vessels.

[(s)](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 regulation that emits "volatile organic compounds" FROM ANY COATING in excess of:

[(i)](A) 0.52 kg/l (4.3 lb/gal) of coating, excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to a coating applicator that applies A clear [coatings] COAT;

(ii)]

(B) 0.42 kg/l (3.5 lb/gal) of coating, excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to a coating applicator in a coating application system that is air dried or forced warm 8-394 REV. 1/77

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air dried at temperatures up to 90 degrees C (194 degrees F);

[(iii)]

[(iv)] (D)

) 0.36 kg/l (3.0 lb/gal) of coating, excluding water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1, delivered to a coating applicator for all other coatings, ADHESIVES, FILLERS OR SEALANTS and coating application systems.

[(s)](4) This subsection applies to all application areas, flashoff areas, air and forced air driers, and ovens used in the surface coating of the MISCELLANEOUS metal parts and products listed in subdivision (s)(2). This regulation also applies to prime coat, top coat, and single coat operations.

[(s)](5) If more than one "emission limitation" in subsection (s)(3) applies to a specific coating, then the least stringent "emission limitation" shall be applied.

[(s)](6) All "volatile organic compound" "emissions" from solvent washings shall be considered in the "emission limitations" in subdivision (s)(3) unless the solvent is directed into containers that prevent evaporation into the atmosphere.

(7) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PREMISE WHICH HAS ACTUAL EMISSIONS OF FIFTEEN (15) POUNDS PER DAY OR MORE IN ANY ONE DAY FROM MISCELLANEOUS METAL PARTS AND PRODUCTS COATING OPERATIONS. AFTER OCTOBER 1, 1989 ANY PREMISE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(t) Manufacture of synthesized pharmaceutical products.

[(t)](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 <u>"volatile organic compounds</u>" 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



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<u>"emissions</u> of <u>"volatile organic compounds</u> from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting workers from excessive <u>"volatile organic compounds"</u> 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.

[(t)](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:

- [(i)](A) If surface condensers are used, the [condenser]
 outlet gas temperature [at] FROM the condenser must
 not exceed:
 - [(1)](i) -25 degrees C when condensing "volatile organic compounds" having a vapor pressure of 40.0 kPa (5.8 psi) or greater at 20 degrees C,

 - - [(4)](iv) 10 degrees C when condensing "volatile organic compounds" having a vapor pressure of 7.0 kPa (1.0 psi) or greater at 20 degrees C, or
 - [(5)](v) 25 degrees C when condensing "volatile organic compounds" having a vapor pressure of 3.50 kPa (0.5 psi) or greater at 20 degrees C, or

[(t)](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 [;] :

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- [(i)](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,
- [(ii)](B) to [18.2] 15.0 kg/day ([40] 33.3 lb/day) or less if ACTUAL "emissions" are less than 150 kg/day (330 lb/day) of "volatile organic compounds."

[(t)](4) The owner or <u>"operator"</u> of a synthesized pharmaceutical manufacturing facility subject to this regulation shall:

- [(i)](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 degrees C; and,
- [(ii)](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 degrees C, unless a more effective control system is used which meets state fire [marshall] MARSHAL standards.

[(t)](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 the liquid contains "volatile organic compounds" and has a vapor pressure of 3.50 kPa (0.5 psi) or more at 20 degrees C.

[(t)](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, [unless] EXCEPT WHEN production, sampling, maintenance, or inspection procedures require "operator" access.

[(t)](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

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FINAL COMPLIANCE WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(u) Manufacture of pneumatic rubber tires

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[(u)] (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.

[(u)(2)(a)](2) The owner or <u>"operator"</u> of [an] ANY undertread cementing, tread end cementing, or bead dipping operation [subject to this regulation] shall:

[(u)(2)(a)(1)] (A) Install and operate a capture system, designed to achieve maximum reasonable capture, [up to 70] 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.

[(u)(2)(a)(2)] (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

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of <u>"volatile organic compounds</u>" 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 [at] 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."

[(u)(2)(b)](3) The owner or "operator" of [a] ANY green tire spraying operation [subject to this regulation] must implement one of the following means of reducing "volatile organic compound" "emissions":

[(u)(2)(b)(1)] (A) Substitute water-based sprays for the normal solvent-based mold release compound; or,

[(u)(2)(b)(2)] (B) Install a capture system designed and operated in a manner that will capture and transfer at least [70.0] <u>90.0</u> 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."

[(u)(2)(c)](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.

[(u)(2)(d) The provisions of subdivision (u)(2)(a) shall not apply to the following operations, provided that the total volatile organic compound emissions from all such operations within a facility, as determined before the application of control equipment is less than:

- (i) 200 pounds per day for undertread cementing;
- (ii) 200 pounds per day for tread end cementing;

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(iii) 200 pounds per day for green tire spraying;

(iv)

r) 100 pounds per day for bead cementing.]

(v) Graphic arts [rotogravers] ROTOGRAVURES and flexography

[(v)] (1) For the purpose of this subsection:

"Flexographic Printing" means the application of words, designs [and] 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, [and] OR other substrates, which are, in subsequent operations, formed into packaging products [and] 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, [and] OR other types of printed materials;

"Roll printing" means the application of words, designs [and] 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[, and] OR pictures to a substrate by means of a roll printing technique which involves [an] intaglio or recessed image areas in the form of cells OR INDENTATIONS.

[(v)] (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;

- [(i)](A) The volatile fraction of EACH ink, as it is applied to the substrate, contains 25.0 percent by volume or less of [organic solvent] VOLATILE ORGANIC COMPOUNDS and 75.0 percent by volume or more of water AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ON TABLE 1(a)-1 in SECTION 22a-174-1; or
- [(ii)](B) [The] EACH ink as it is applied to the substrate, lesswater AND EXEMPT VOLATILE ORGANIC COMPOUNDS LISTED ONTABLE 1(a)-1 in SECTION 22a-174-1, contains 60.0percent by volume or more nonvolatile material; or,
- [(iii)] (C) The owner or "operator" installs and operates;
 - [(1)](<u>i</u>) A carbon adsorption system which reduces the volatile organic <u>"emissions"</u> from the capture system by at least 90.0 percent by weight OVER THE ADSORPTION CYCLE OR 24 HOURS WHICHEVER IS SHORTER; or

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- [(2)] (11) An incineration system provided that 90.0 percent of the nonmethane "volatile organic compounds" (measured as total combustible carbon) which enter the "incinerator" PER HOUR are oxidized to carbon dioxide and water; or,
- [(3)] (iii) A system demonstrated to have control efficiency equivalent to or greater than the above REQUIRED 90 PERCENT and approved by the "Commissioner" BY PERMIT OR ORDER.

[(v)] (3) A capture system must be used in conjunction with the "emission" control systems in [part (v)(2)(iii)] SUBPARAGRAPH $\overline{22a-174-20}(v)(2)(C)$. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall reduction in "volatile organic compound" "emissions" PER HOUR FROM EACH PRINTING PRESS of at least:

- [(i)](A) 75.0 percent where a publication rotogravure process is employed;
- [(ii)](B) 65.0 percent where a packaging rotogravure process is employed; or,
- [(iii)] (C) 60.0 percent where a flexographic printing process is employed.

(4) THE PROVISIONS OF THIS SUBSECTION APPLY TO ANY PRINTING LINE WHICH HAS ACTUAL EMISSIONS OF FORTY (40) POUNDS PER DAY OR MORE IN ANY ONE DAY OR TO A PREMISE WHICH HAS POTENTIAL EMISSIONS OF ONE HUNDRED TONS PER YEAR OR MORE FROM ALL PRINTING OPERATIONS. AFTER OCTOBER 1, 1989 ANY PRINTING LINE 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 COMPLY WITH THE CONTROL REQUIREMENTS OF THIS SUBSECTION FOR THAT PIECE OF EQUIPMENT.

(w) Dry cleaning facilities

[(w)] (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.

[(w) (2) Dry cleaning facilities using perchloroethylene
(i)]

(2) The owner or "operator" of a dry cleaning facility which uses perchloroethylene shall;

[(1)]

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(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.

[(2)]

(B) maintain all system components so as to prevent the leaking of liquid "volatile organic compounds" and where applicable, prevent [excessive] PERCEPTIBLE vapor losses from gaskets, seals, ducts and related equipment;

[(3)]

(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;

[(4)]

(D) reduce the "volatile organic compounds" from all solvent stills to no greater than 60 Kg PER 100 KG of wet waste material; and

- [(5)]
 - (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

[(ii)](3) The provisions of [subsection (2)(i)(1)] SUBPARAGRAPH (2)(A) OF THIS SUBSECTION 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.

- [(iii)] (4) Compliance with this section shall be determined by:
 - $[(1)](\underline{A}) \quad \text{a visual inspection, for [subsections (2)(i)(2) and} \\ (2)(i)(5)] \quad \text{SUBPARAGRAPHS } (\underline{2})(\underline{B}) \quad \text{AND } (\underline{2})(\underline{E}) \quad \text{ABOVE; and}$
 - [(2)](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 [sub-section (2)(1)(1)] SUBPARAGRAPH (2)(A) ABOVE ; and
 - [(3)](C) Use of [the procedure in the American National Standards Institute paper, "Standard Method of Test for Dilution of Gasoline Engine Crankcase Oils" for] subsections (2)(i)(3) and (2)(i)(4).] 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.

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(x) Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical & Polymer Manufacturing Equipment.

(1) Definitions.

For purposes of this subsection:

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"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

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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.

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(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 values shall be monitored after each over-pressure relief to ensure the value 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 [unless] 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.

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If after four consecutive quarters of monitoring less than two percent of the values in gas/vapor or light liquid service show evidence of leakage then the owner or operator may monitor the values for gaseous leaks only once a year during the third or fourth quarter. If the number of values showing evidence of leakage remains at two percent or less, then these values need only be monitored once a year during the third or fourth quarter. However, if more than two percent of these values 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 values showing evidence of leakage.

(10) Delaying repairs.

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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.

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- (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 values 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 demonstrated 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:

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"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

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(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.

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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, [than] THEN an average or typical value may be [assumed] 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 $\underline{25}$ AS FOUND AT APPENDIX A OF TITLE $\underline{40}$ 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)
$$M = \frac{(2.494 \times 10^{-3})(\sum_{i=1}^{n} \text{Ci Wi})(\text{Qs})}{\text{S}}$$

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 <u>18</u> AS FOUND AT <u>APPENDIX A</u> OF <u>TITLE 40</u> <u>CODE</u> OF FEDERAL REGULATIONS PART 60.
- Wi = Molecular weight of sample component i, (g VOC/gmole VOC).

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S = Production rate during the emission test (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 included, 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 technologically 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) [Applicability. The provisions of subsections (m) through (v) inclusive and (ee) apply to any article, machine, equipment or other contrivance which emits volatile organic compounds in excess of eight (8) pounds in any one hour or in excess of forty (40) pounds in any one day.]

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" .

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(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 <u>18</u>, <u>25</u>, <u>25</u>A OR <u>25</u>B AS FOUND AT APPENDIX A OF TITLE <u>40</u> CODE OF FEDERAL REGULATIONS PART <u>60.</u> 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.



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(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 $\underline{22a-174-20}(aa)$ MUST BE KEPT AT THE SOURCE FOR A MINIMUM OF TWO YEARS.

(bb) Compliance methods.

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(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 non-methane "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 [determined by comparing the "process source" emissions to the "volatile organic compound" emissions which would exist if the process utilized conforming coatings. This computation shall be on a solids applied basis to determine the net overall reductions required. The "Commissioner" shall use the most stringent emission limit in all cases.] 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 providing the net emission rate is equal to or less than the emission rate which would result

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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 computations 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) [For the purposes of subdivisions (bb) and (cc) of section 22a-174-20 solids-applied basis means a comparison between the current volatile organic compound emissions generated by a gallon of solids applied or consumed by a non-conforming coating used in a process source and the theoretical volatile organic compound emissions which would result when a gallon of solids is applied or consumed by the same process source using a conforming coating. This numerical comparison is the basis for determining the minimum net overall volatile organic compound reductions required.]

TO CALCULATE HOURLY ALLOWABLE "VOLATILE ORGANIC COMPOUND" (VOC) EMISSIONS UNDER SUBDIVISION (3) OF THIS SUBSECTION, FOLLOW THE STEPS IN SUBPARAGRAPHS (A) THROUGH (D) BELOW.

- (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 <u>VOC</u> 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

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section <u>1</u>

<u>.7</u> .6 .8		$\frac{2.21}{4.02}$
<u>.8</u> .9		$\frac{4.52}{4.79}$
.0 .5		$\frac{5.07}{6.68}$
<u>.5</u> .7 .8		7.44
.8		7.85 9.79
.2 .3 .5		10.34
<u>.5</u>	9	21.74

(cc) Alternative emission reductions.

(cc)(1) The owner or "operator" of a "stationary source" subject to the provisions of subsections [(1)] (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:

- [(i)](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:
 - [(a)](1) A description of the emission source or "sources" which will not comply with the prescribed "emission limitations";
 - [(b)](ii) Pounds per hour of "volatile organic compounds" emitted which are in excess of permissible "emissions_

for each emission source;

- - [(d)](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

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[(e)] (v) A description of the procedures and methods used to determine the "emissions" of "volatile organic compounds"; and

[(ii)]

(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;

[(iii)]

(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;

[(iv)]

- (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 <u>"emissions limitation</u>"

prescribed in subsections [(1)] (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 <u>42</u> U.S.C. <u>7401-7642</u>. 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 [(1)] (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:

[(i)](A) Information on the nature and location of the facility of process for which the application is made;

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[(ii)]
 (B) The type and quantity of "emissions" that will occur during
 the period of shutdown;

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[(iii)]

(C) The quantity of natural gas saved as a result of the shutdown;

[(iv)] (D)

) Any other relevant information the "Commissioner" may request in order to make a determination regarding the petition.

(dd)(2) The owner or <u>"operator"</u> of any <u>"stationary source</u> for which a petition has been submitted in accordance with subdivision (dd)(1) shall:

[(i)](A) Publish by prominent advertisement in the "region" affected a notice that the petition has been submitted;

[(ii)] (B

(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:

[(i)](A) Is required to meet the requirements of any other section of these regulations; or

- [(ii)]
- (B) Will prevent or interfere with the "attainment" or maintenance of any federal or state "ambient air quality standard"; [(iii)]

(C) 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:

[(i)](A) Requirements for special control measures to be taken by the owner or "operator" to minimize "emissions" during the period of the petition;

- [(ii)]
 - (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 [his] 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".

(ee)(1) The owner or "operator" of any "premise" with "potential emissions" of one hundred (100) tons per year or more of "volatile organic compounds" shall use "Reasonably Available Control Technology" ON ALL UNREGULATED SOURCES to limit the discharge of "volatile organic compounds" by December 31, 1985 unless a compliance plan is filed under subdivision (ee)(3) of section 22a-174-20. In calculating "potential emissions" of a "stationary

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source <u>"</u> any physical or operational restriction on the capacity of the source to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the maximum rated capacity shall be treated as part of its design if the limitation or the effect [of] the limitation would have on emissions is <u>"federally enforceable"</u>.

(ee)(2) [The provisions of subdivision (ee)(1) do not apply to] FOR THE PURPOSES OF DETERMINING THE "POTENTIAL EMISSIONS" FROM A "PREMISE", THE EMISSIONS FROM any "stationary source" which must meet any provisions of subsections (a), (b) OR [(m)] (1) thru [(v)] (y) inclusive of section 22a-174-20 SHALL NOT BE INCLUDED.

(ee)(3) The "Commissioner" may allow the owner or "operator" of any "premise" subject to the provisions of subdivision 22a-174-20(ee)(1) to submit a compliance plan by July 1, 1985 which demonstrates compliance WITH "REASONABLY AVAILABLE CONTROL TECHNOLOGY" as expeditiously as practicable but not later than December 3I, 1987. THE "COMMISSIONER" MAY, BY PERMIT OR ORDER, ACCEPT RESTRICTIONS ON EMISSIONS SUCH THAT THE EMISSIONS FOR ANY TWELVE (12) CONSECUTIVE MONTHS DO NOT EXCEED ONE HUNDRED (100) TONS PER YEAR IN LIEU OF REQUIRING THE USE OF "REASONABLY AVAILABLE CONTROL TECHNOLOGY" ONLY FOR THOSE "PREMISES" WHICH HAVE NOT HAD "ACTUAL EMISSIONS" IN EXCESS OF ONE HUNDRED (100) TONS FOR ANY YEAR SINCE 1980.

(ee)(4) The "Commissioner" shall provide public notice [with the opportunity for] AND a public hearing for any compliance determination under subdivision 22a-174-20(ee)(1) or acceptance of a compliance plan under subdivision 22a-174-20(ee)(3). THE "COMMISSIONER" SHALL ISSUE AN ORDER REQUIRING THE USE OF "REASONABLY AVAILABLE CONTROL TECHNOLOGY" AND SUBMIT ANY SUCH ORDER FOR APPROVAL BY THE "ADMINISTRATOR" IN ACCORDANCE WITH THE PROVISIONS OF <u>42</u> U.S.C. 7401-7642.

Section 2

Subsection 22a-174-3(k) of the Regulations of Connecticut State Agencies is amended to read as follows:

(k) Requirements for the Prevention of Significant Deterioration of Air Quality (PSD) Program.

(k)(1) Applicability.

Except as provided in subdivision 22a-174-3(k)(3), the requirements of subsection 22a-174-3(k) apply to the owner or "operator" of a "major stationary source" which is a new "major stationary source" or "major modification" due to "emissions" of a particular "criteria air pollutant" other than a "criteria air pollutant" for which the air quality control region or portion

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Section 2

Subsection 22a-174-3(k) of the Regulations of Connecticut State Agencies is amended to read as follows:

(k) Requirements for the Prevention of Significant Deterioration of Air Quality (PSD) Program.

(k)(1) Applicability.

Ny.

Except as provided in subdivision 22a-174-3(k)(3), the requirements of subsection 22a-174-3(k) apply to the owner or "operator" of a "major stationary source" which is a new "major stationary source" or "major modification" due to "emissions" of a particular "criteria air pollutant" other than a "criteria air pollutant" for which the air quality control region or portion

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thereof, in which the new "major stationary source" or "major modification" is located is classified as a "non-attainment area".

(k)(2) Netting.

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In determining the applicability of subdivision 22a-174-3(k)(1) the "Commissioner" shall not allow the "netting" of emissions.

(k)(3) Exemptions.

Notwithstanding the provisions of subdivision 22a-174-3(k)(1), the "Commissioner" shall not apply the provisions of subdivisions (k)(4) through (k)(6) of section 22a-174-3, inclusive, to the owner or "operator" of a new "major stationary source" or a "major modification" which:

- (A) received a Prevention of Significant Deterioration permit under federal regulations prior to February 1, 1989; or
- (B) is a "major modification" solely because of the use of gaseous fuel which the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any "federally enforceable" "permit to construct" which was issued after January 6, 1975.
 - (k)(4) Best Available Control Technology.

In addition to the requirements of subsections (a) through (j) inclusive, of section 22a-174-3 the owner or "operator" of a new "major stationary source" or "major modification" subject to this subsection shall install "Best Available Control Technology" as determined by the "Commissioner" for each particular "air pollutant" for which the new "major stationary source" or "major modification" has "potential emissions" equal to or greater than the amount listed in Table 3(k)-1 below. The owner or "operator" of any new "major stationary source" or "major modification" shall make and submit to the "Commissioner", for approval, a "BACT" determination for each "air pollutant", as required by the "Commissioner", including cost estimates of all control options as may be specified by the "Commissioner" shall review the determination and make modifications as appropriate, at the latest time up to eighteen months prior to the project. At that time, the owner or operator may be required to demonstrate the adequacy of any previous determination.

(k)(5) Increment Consumption for Sulfur Dioxide.

The owner or "operator" of a "new major stationary source" or "major modification" subject to the provisions of subdivision 22a-174-3(k)(1), the "allowable emissions" of which have a significant impact on air quality, shall not cause or contribute to a violation of the maximum allowable increase of sulfur dioxide listed in Table 3(k)-2 below, after the baseline date in any "attainment area" for that "air pollutant". For the purposes of this subdivision, baseline concentration means the "ambient air" sulfur dioxide concentration levels in existence on December 17, 1984. For the purposes of subsection 22a-174-3(k) in order to determine if the "allowable emissions" of an individual "air pollutant" do not have a significant impact on air quality the

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amount of "ambient air" impact which will not be considered significant is less than the amounts listed to Table 3(c)-1 in subdivision 22a-174-3(c)(1)(B). In determining the increase from the baseline concentration for the subject new "major stationary source" or "major modification", the "Commissioner" shall take into consideration:

- (A) "allowable emissions" from the new "major stationary source" or "major modification" subject to the provisions of subdivision 22a-174-3(k)(1);
- (B) "actual emissions" from all "major stationary sources" which were required to receive a "permit to construct" from the "Commissioner" after January 6, 1975;
- (C) any "modification" with "actual emissions" equal to or greater than fifteen (15) tons per year to a "major stationary source" which was required to receive a "permit to construct" after January 6, 1975 and before December 17, 1984 except that "allowable emissions" will be used if the "modification" was on the applicant's "premise"; and
- (D) all "stationary sources" other than "major stationary sources" with "actual emissions" equal to or greater than fifteen (15) tons per year and which were required to receive a "permit to construct" from the "Commissioner" on or after December 17, 1984. The "Commissioner" may consider the "allowable emissions" from "stationary sources" for which a "permit to construct" is pending and which has been deemed complete in accordance with subdivision 22a-174-3(d)(3) in any increment consumption modeling analysis required pursuant to this subsection.

In addition the "Commissioner" may take into consideration decreases in "actual emissions" and "federally enforceable" "allowable emissions" from "sources" located on the applicant's "premise" which occurred on or after December 17, 1984 and any proposed decreases in "actual emissions" and "allowable emissions" which will occur prior to the new "major stationary source" or "major modification" starting operation. For the purpose of calculating "allowable emissions" of a "stationary source" for this subdivision, any physical or operational restriction on the capacity of the "source" to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the "maximum rated capacity" shall be treated as part of its design if the limitation or the effect of the limitation on emissions is "federally enforceable".

(k)(6) Increment Consumption for All Other "Air Pollutants".

The owner or "operator" of a "major stationary source" or "major modification" with "potential emissions" equal to or greater than the amount listed in Table 3(k)-1 below, subject to the provisions of subdivision 22a-174-3(k)(1), the "allowable emissions" of which have a significant impact on air quality, shall not cause a violation of the maximum allowable increase of any "air pollutant" listed in Table 3(k)-2 below, after the baseline date in any "attainment area". For the purposes of this subdivision, baseline concentration means the ambient concentration levels of a particular "air pollutant" in existence on the baseline date. For the purposes

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of subsection 22a-174-3(k) in order to determine if the "allowable emissions" of an individual "air pollutant" do not have a significant impact on air quality the amount of "ambient air" impact which will not be considered significant is less than the amounts listed in Table 3(c)-1 in subparagraph 22a-174-3(c)(1)(B). For the purposes of this subdivision, baseline date means the date on which the first complete application is submitted by a new "major stationary source" or "major modification" of the particular "air pollutant" subject to the provisions of this subsection. In determining the increase from the baseline concentration for the subject "major stationary source" or "major modification", the "Commissioner" shall take into consideration:

- (A) "allowable emissions" from the proposed "major stationary source" or "major modification";
- (B) "actual emissions" from all "major stationary sources" which were required to receive a "permit to construct" from the "Commissioner" after January 6, 1975;
- (C) any "modification" with "actual emissions" equal to or greater than fifteen (15) tons per year to a "major stationary source" which was required to receive a "permit to construct" after January 6, 1975 and before the baseline date except that "allowable emissions" will be used if the "modification" was on the applicant's "premise"; and
- (D) all "stationary sources" other than "major stationary sources" with "actual emissions" equal to or greater than fifteen (15) tons per year and which were required to receive a "permit to construct" from the "Commissioner" after the baseline date. The "Commissioner" may consider the "allowable emissions" from "stationary sources" for which a "permit to construct" is pending and which has deemed complete in accordance with subdivision 22a-174-3(d)(3) in any increment consumption modeling analysis required pursuant to this subsection.

In addition the "Commissioner" may take into consideration decreases in "actual emissions" and "federally enforceable" "allowable emissions" from "sources" located on the applicant's "premise" which occurred on or after the baseline date and any proposed decreases in "actual emissions" and "allowable emissions" which will occur prior to the new "major stationary source" or "major modification" starting operation. For the purpose of calculating "allowable emissions" of a "stationary source" for this subdivision, any physical or operational restriction on the capacity of the "source" to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the "maximum rated capacity" shall be treated as part of its design if the limitation or the effect of the limitation on emissions is "federally enforceable".

- (k)(7) Monitoring.
- [(A) The permit application for the new "major stationary source" or "major modification" shall contain an analysis of meteorological and "ambient air" quality monitoring data necessary to establish the effect which emissions from the applicant's "stationary source" may have, or is having, on

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"ambient air" quality in any area for any "air pollutant" which;

- (i) the "stationary source" has "potential emissions" in excess of the amounts listed in Table 3(k)-(1) below; or
- (ii) is listed in section 22a-174-24 or is a National "Ambient Air Quality Standard".
- (B) The owner or "operator" of the new "major stationary source" or "major modification" shall conduct such meteorological and "ambient air" quality monitoring as the "Commissioner" determines may be necessary to establish the effect which emissions from the applicant's "stationary source" may have, or is having, on "ambient air" quality in any area for any "air pollutant" which;
- (i) the "stationary source" has "potential emissions" in excess of the amounts listed in Table 3(k)-(1) below;
- (ii) is listed in section 22a-174-24 as a National or State "Ambient Air Quality Standard" ; or
- (iii) is listed in Table 29-1, 29-2 or 29-3 in section 22a-174-29.

The meteorological and "ambient air" quality monitoring data required above shall be collected both before and after construction of the new "major source" or "major modification" if such "source" has "potential emissions" in excess of the amount listed in Table 3(k)-1 below, otherwise such data must be collected prior to the receipt of the "permit to operate" under subsection (f) of section 22a-174-3.

(C) Any monitoring performed for the purposes of this subdivision shall be with the prior approval of the "Commissioner" and conducted in a manner acceptable to the "Commissioner". Any monitoring shall conform with the requirements of Title 40 Code of Federal Regulations Part 58, Appendix B and with other requirements established by the "Commissioner".]

(A) ANY APPLICATION FOR A PERMIT UNDER SUBSECTION (k) SHALL CONTAIN AN ANALYSIS OF AMBIENT AIR QUALITY IN THE AREA THAT THE MAJOR STATIONARY SOURCE OR MAJOR MODIFICATION WOULD AFFECT FOR EACH OF THE FOLLOWING POLLUTANTS:

- (i) FOR THE SUBJECT SOURCE, EACH POLLUTANT FOR WHICH IT HAS A POTENTIAL EMISSION IN EXCESS OF THE AMOUNT LISTED IN TABLE 3(k)-1 BELOW.
- (11) FOR THE MODIFICATION, EACH POLLUTANT WHICH WILL RESULT IN AN INCREASE IN "POTENTIAL EMISSIONS" IN EXCESS OF THE AMOUNT LISTED IN TABLE 3(k)-1 BELOW.
- (111) FOR THE SUBJECT SOURCE OR MODIFICATION, EACH POLLUTANT WHICH IS LISTED IN SECTION 22a-174-24 OR FOR WHICH THERE IS A NATIONAL "AMBIENT AIR QUALITY STANDARD".

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(B) THE ANALYSIS UNDER SUBPARAGRAPH 3(k)(7)(A) FOR ANY AIR POLLUTANT FOR WHICH NO NATIONAL AMBIENT AIR QUALITY STANDARD EXISTS 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 THE EMISSIONS FOR THAT POLLUTANT WOULD AFFECT.

(C) THE ANALYSIS UNDER SUBPARAGRAPH 3(k)(7)(A) FOR ANY AIR POLLUTANT (OTHER THAN NONMETHANE HYDROCARBONS) FOR WHICH SUCH A STANDARD DOES EXIST 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 THE STANDARD OR ANY MAXIMUM ALLOWABLE INCREASE LISTED IN TABLE 3(k)-2 BELOW.

(D) IN GENERAL, THE CONTINUOUS AIR QUALITY MONITORING DATA THAT IS REQUIRED SHALL HAVE BEEN GATHERED OVER A PERIOD OF ONE YEAR AND SHALL REPRESENT THE YEAR PRECEDING RECEIPT OF THE APPLICATION UNLESS

THE COMMISSIONER DETERMINES, BY PERMIT OR ORDER, THAT A COMPLETE AND ADEQUATE ANALYSIS CAN BE ACCOMPLISHED WITH MONITORING DATA GATHERED OVER A PERIOD SHORTER THAN ONE YEAR (BUT NOT TO BE LESS THAN FOUR MONTHS). ANY DATA THAT IS REQUIRED SHALL HAVE BEEN GATHERED OVER AT LEAST THAT SHORTER PERIOD.

(E) THE OWNER OR OPERATOR OF A MAJOR STATIONARY SOURCE OR MAJOR MODIFICATION SUBJECT TO THIS SUBSECTION SHALL AFTER CONSTRUCTION OF THE STATIONARY SOURCE OR MODIFICATION, CONDUCT SUCH AMBIENT MONITORING AS THE COMMISSIONER DETERMINES, BY PERMIT, IS NECESSARY TO DETERMINE THE EFFECT EMISSIONS FROM THE STATIONARY SOURCE OR MODIFICATION MAY HAVE, OR ARE HAVING, ON AIR QUALITY IN ANY AREA.

(F) THE OWNER OR OPERATOR SHALL MEET THE REQUIREMENTS OF TITLE 40 CODE OF FEDERAL REGULATIONS PART 58, APPENDIX B DURING THE OPERATION OF THE MONITORING NETWORK FOR PURPOSES OF SATISFYING THIS SUBSECTION.

(k)(8) Additional Impact Analyses.

The owner or "operator" of the new "major stationary source" or "major modification" shall, as part of the application, provide the "Commissioner" with:

- (A) an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the construction and operation of the new "major stationary source" or "major modification" and 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; and
- (B) an analysis, based upon methods approved by the "Commissioner", of the "ambient air" quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the new "major stationary source" or "major modification".

(k)(9) Source Information.

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The owner or "operator" of the new "major stationary source" or "major modification" shall submit all information necessary to perform any analysis or make any determination under this subsection. Such information shall include, but may not be limited to:

- (A) a description of the nature, location, design capacity and typical operating schedule of the new "major stationary source" or "major modification", including specifications and drawings showing its design and plant layout;
- (B) a schedule for construction of the new "major stationary source" or "major modification"; and
- (C) a detailed description as to what system of continuous emission reduction is planned for the new "major stationary source" or "major modification", "emission" estimates, or any other information necessary to determine that the "Best Available Control Technology" would be applied.
- (k)(10) Additional Information.

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Upon the request of the "Commissioner", the owner or "operator" of the new "major stationary source" or "major modification" shall also provide information on:

- (A) the "ambient air" quality impact of the new "major stationary source" or "major modification", including meteorological and topographical data necessary to estimate such impact; and
- (B) the "ambient air" quality impacts and the nature and extent of general commercial, residential, industrial and other growth which has occurred since August 7, 1977 in the area the new "major stationary source" or "major modification" would affect. In the event that the August 7, 1977 reference date is changed by federal judicial or administrative action, the applicant shall apply that date which is valid under federal law.

(k)(11) Additional Source Obligations.

- (A) The granting of a permit under this subsection shall not relieve any owner or "operator" of the responsibility to comply fully with applicable provisions of these regulations and any other requirements under local, state or federal law.
- (B) At such time that a particular "stationary source" or "modification" becomes a "major stationary source" or "major modification" solely by virtue of a relaxation in any enforceable limitation if such enforceable limitation was established after August 7,1980, on the capacity of the "stationary source" or "modification" otherwise to emit a particular "air pollutant", such as a restriction on the hours of operation, then the requirements of this subsection shall apply to the "stationary source" or "modification" as though construction had not yet "commenced" on the "stationary source" or "modification".

(k)(12) Additional Public Participation Requirements.

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In addition to the requirements of subsection 22a-174-3(j), the "Commissioner" shall require additional public participation activities. This includes but is not limited to requiring the applicant to:

- (A) notify the public, by advertisement in a newspaper of general circulation in each region in which the new "major stationary source" or "major modification" would be constructed, of the application, the "Department's" recommended decision on the subject application under subdivision 22a-174-3(d)(5) and any other support material the "Commissioner" deems appropriate, the degree of Prevention of Significant Deterioration increment consumption that is expected from the new "major stationary source" or "major modification", and the opportunity for comment at a public hearing if one is requested as well as written comment; and
- (B) send a copy of the notice required under subparagraph 22a-173-3(k)(12)(A) to: (i) the "Administrator" through the Boston regional office of the U.S. Environmental Protection Agency; (ii) the chief executive of the municipality where the source or modification would be located; (iii) the appropriate Connecticut Regional Planning Agency; (iv) any "Indian Governing Body" whose lands may be affected by emissions from the new "major stationary source" or "major modification"; and (v) the Director of the air pollution control program in adjoining states.

Table 3(k)-1 EMISSION LEVELS

Tons Per Year
100
40
40
25
15
40
10
10
10
7
3
1
0.6
0.1

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	Asbestos		0.007
	Beryllium		0.0004
•	Any other "air pollutant" feder under the Clean Air Act	ally regulated	0.0

Table 3(k)-2

MAXIMUM ALLOWABLE INCREASE ABOVE BASELINE CONCENTRATION

Air Pollutant	PSD Increment (ug/m ³)
Total Suspended Particulate	
Annual Geometric Mean 24-Hour Average	19 37
Sulfur Dioxide	
Annual Geometric Mean 24-Hour Average 3-Hour Average	20 91 512

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Section 22a-174-1 of the Regulations of Connecticut State Agencies is amended to read as follows:

Sec. 22a-174-1. Definitions.

(a) For the purposes of sections 22a-174-1 through 22a-174-200 the following definitions shall be used:

(1) "Actual emissions" means the rate of emissions from a source, including fugitive emissions quantified by permit, order or by registration information, after application of air pollution control equipment, of a particular air pollutant where the rate of emissions is calculated using:

- (A) real or expected production rates, hours of operation, and types of materials processed, stored or combusted for the period specified; and
- (B) information from the [COMPLIATION] <u>COMPILATION</u> 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.

For the purposes of determining actual emissions in subsections (k) and (1) of section 22a-174-3 and in the definitions of excessive

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concentration, commence or commencement and potential emissions, the Commissioner shall determine the actual emissions of a stationary source over the two (2) year period prior to the date of an application under subsection 22a-174-3(a). The Commissioner may allow the use of another period which is deemed more representative, but in no event can it be before the design year of an applicable attainment plan.

(2) "Administrator" means the administrator of the United States Environmental Protection Agency.

(3) "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, uncombined water vapor or water droplets, or molecular oxygen or nitrogen.

(4) "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 as unreasonably to interfere with the enjoyment of life and property.

(5) "Allowable emissions" means the rate of emissions from a stationary source of a particular air pollutant where the emission rate is calculated using the maximum rated capacity of the source, unless the source is subject to permit conditions or other order of the Commissioner which limit the maximum rated capacity by restricting the operating rate or hours of operation of the source, and the most stringent of the following:

- (A) Applicable standards as set forth in Title 40 of the Code of Federal Regulations Part 60 and Part 61, as from time to time may be amended;
- (B) The applicable emission limitation under these regulations including those with a future compliance date; or
- (C) The emission rate specified as a permit condition.

For the purpose of calculating allowable emissions in subparagraph 22a-174-3(c)(1)(B), subdivisions (k)(5), (k)(6), (1)(1)or (1)(5) in section 22a-174-3 or in the definitions of dispersion technique and excessive concentration, the emission limitation in (B) above, emission rate in (C) above and the permit conditions or other order of the Commissioner which limit the maximum rated capacity by restricting the operating rate or hours of operation of the source must be federally enforceable.

(6) "Ambient air" means that portion of the atmosphere external to buildings, to which the general public has access.

(7) "Ambient air quality standard" (AAQS) 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.

(8) "Architectural coating" means a coating used for residential or commercial buildings and their appurtenances, or industrial buildings, or other outdoor structures.

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(9) "Attainment" means that the quality of the ambient air, as determined by the Commissioner, meets National Ambient Air Quality Standards for a given air pollutant for which such standards have been established by the United States Environmental Protection Agency.

(10) "Attainment area" means a geographic area which has been designated as attainment under Title 40 Code of Federal Regulations Part 81 in accordance with the provisions of 42 U.S.C. Section 7407 (section 107 of the Clean Air Act).

(11) "Best Available Control Technology" or "BACT" means an emission limitation, including a visible emission standard, 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 for a similar or representative type of source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air pollutant. In determining BACT the Commissioner may take into account any emission limitation, including any visible emission standard, which has been achieved in practice under any permit limitation or demonstrated by any stack test acceptable to the Commissioner. For the purposes of this definition, the Commissioner may exclude any stack 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. In determining BACT the Commissioner shall take into account energy, environmental and economic impacts and other costs. In no event shall the application of BACT result in emissions of any pollutant which would exceed the emission allowed by an applicable standard under Title 40 of the Code of Federal Regulations Part 60 and Part 61, as from time to time may be amended. In determining BACT for a reconstructed the Commissioner shall take into account the provisions of source. Title 40 of the Code of Federal Regulations Part 60.15(f)(4), as from time to time may be amended, in assessing whether a standard of performance under Part 60 is applicable to such source. 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.

(12) "BEGIN ACTUAL CONSTRUCTION" MEANS INITIATION OF PHYSICAL ON-SITE CONSTRUCTION ACTIVITIES OF AN EMISSIONS UNIT WHICH ARE OF A PERMANENT NATURE. SUCH ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, INSTALLATION OF BUILDING SUPPORTS AND FOUNDATIONS, LAYING OF UNDERGROUND PIPEWORK, AND CONSTRUCTION OF PERMANENT STORAGE STRUCTURES. WITH RESPECT TO A CHANGE IN THE METHOD OF OPERATION THIS TERM REFERS TO THOSE ON-SITE ACTIVITIES WHICH MARK THE INITIATION OF THE CHANGE.

[(12)] (13) "BTU" means British thermal unit, which is the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit.

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[(13)] (14) "CAS Number" means the number given to a compound by the American Chemical Society's Chemical Abstract Service.

[(14)] (15) "Combustion efficiency" means the percentage number calculated in accordance with the following formula:

 $CE = \frac{[CO_2]}{[CO] + [CO_2]} X (100).$

where:

: CE = Combustion efficiency in percent CO₂ = Amount of carbon dioxide CO² = Amount of carbon monoxide; and

CO and CO₂ are both measured in volume units.

[(15)] (16) "Commence" or "Commencement" as applied to construction of a stationary source or modification means that the owner or operator has all necessary permits or approvals required under federal air quality control laws and these regulations, and has either:

- (A) Begun, or caused to begin, a program of physical on-site construction of the source:
 - (i) Subject to a schedule which will lead to completion in a reasonable time; and
 - (ii) Without any breaks in such construction of more than 18 months; or
- (B) Entered into site specific binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

For the purposes of this definition construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification) which would result in a change in either potential or actual emissions.

[(16)] (17) "Commissioner" means the Commissioner of Environmental Protection, or any member of the department of environmental protection 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.

[(17)] (18) "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for the purposes of permit processing does not preclude the department from requiring or accepting additional information.

[(18)] (19) "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 Clean Air Act.

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[(19)] (20) "Department" means the department of environmental protection.

[(20)] (21) "Deterioration in air quality" means that a pollutant concentration in a region or subregion for any pollutant specified in these regulations will exceed the maximum pollutant concentration for the specified time period for that region or subregion.

[(21)] (22) "Dioxin emissions" means tetrachlorodibenzodioxin (TCDD) and tetrachlorodibenzofuran (TCDF) emissions or emissions of any other isomers of comparable toxicity. For the purposes of this definition, the Commissioner shall determine the equivalent amount of 2,3,7,8-TCDD using the following toxic equivalency factors (TEF):

Form of Dioxin emissions	TEF
monochlorodibenzodioxin	0
dichlorodibenzodioxin	0
trichlorodibenzodioxin	0
2,3,7,8 tetrachlorodibenzodioxin	1.0
other tetrachlorodibenzodioxins	0.01
2,3,7,8 pentachlorodibenzodioxin	0.5
other pentachlorodibenzodioxins	0.005
2,3,7,8 hexachlorodibenzodioxin	0.04
other hexachlorodibenzodioxins	0.0004
2,3,7,8 heptachlorodibenzodioxin	0.001
other heptachlorodibenzodioxins	0.00001
octachlorodibenzodioxin	0
monochlorodibenzofuran	0
dichlorodibenzofuran	0
trichlorodibenzofuran	0
2,3,7,8 tetrachlorodibenzofuran	0.1
other tetrachlorodibenzofurans	0.001
2,3,7,8 pentachlorodibenzofuran	0.1
other pentachlorodibenzofurans	0.001
2,3,7,8 hexachlorodibenzofuran	0.01
other hexachlorodibenzofurans	0.0001
2,3,7,8 heptachlorodibenzofuran	0.001

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other heptachlorodibenzofurans

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0

0.00001

octachlorodibenzofuran

To determine total dioxin emissions, multiply the isomer concentration in the sample by the appropriate toxic equivalency factor and then add the products to obtain the total 2,3,7,8-TCDD equivalents in the sample.

[(22)] (23) "Discharge point" means any "stack" and shall also include any area from which a "hazardous air pollutant" emanates by evaporation, diffusion, or wind entrainment into the "ambient air."

[(23)] (24) "Dispersion technique" means any method which attempts to affect the concentration of a pollutant in the ambient air by:

- (A) Using that portion of a stack which exceeds the good engineering practice stack height;
- (B) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
- (C) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack or other selective handling of exhaust gas so as to increase the exhaust gas plume rise.

The preceding sentence does not include:

- (i) the reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;
- (ii) The merging of exhaust gas streams where:
 - (aa) The owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams; or
 - (bb) after July 8, 1985 such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of dispersion technique applies only to the emission limitation for the pollutant affected by such change in operation; or
 - (cc) before July 8, 1985 such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Commissioner shall

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presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that the merging was not significantly motivated by such intent, the Commissioner shall deny credit for the effect of such merging in calculating the allowable emissions of the source.

- (iii) smoke management in agricultural or silvacultural prescribed burning programs;
- (iv) episodic restrictions on residential woodburning and open burning; or
- (v) techniques under part C of this definition which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide do not exceed five thousand (5,000) tons per year.

[(24)] (25) "Emission" means the act of releasing or discharging air pollutants into the ambient air from any source.

[(25)] (26) "Emission limitation" and "Emission standard" mean a requirement established by the Commissioner or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement which limits the level of opacity, prescribes equipment or fuel specifications, or relates to the operation or maintenance of a source to assure continuous emission reduction.

[(26)] (27) "Excessive concentration" has the same meaning as ascribed to that term in Title 40 Code of Federal Regulations Part 51.100(kk).

[(27)] (28) "Federally enforceable" means all limitations and conditions which are approved by the Administrator, including those requirements developed pursuant to 40 CFR Parts 52.21, 60 and 61, requirements within any applicable state implementation plan, and any permit to construct requirements established pursuant to section 22a-174-3.

[(28)] (29) "Flare" means an apparatus or contrivance for the burning of flammable gases or vapors at or near the exit of a stack, flue or vent.

[(29)] (30) "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.

[(30)] (31) "Fugitive dust" means solid airborne particulate matter emitted from any source other than through a stack.

[(31)] (32) "Fugitive emissions" means fugitive dust or those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

[(32)] (33) "Good engineering practice stack height or (GEP)" has the same meaning as ascribed to that term in Title 40 Code of Federal Regulations Part 51.100(ii).

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[(33] <u>(34)</u> "Hazardous air pollutant" means a substance listed in either Table 29-1, 29-2, or 29-3 of section 22a-174-29.

[(34)] (35) "Hazardous air pollutant advisory panel" or "Panel" means the panel created by Public Act 85-590.

[(35)] (36) "Hazard limiting value" or "HLV", means the highest acceptable concentration in the "ambient air" of a "hazardous air pollutant," as shown in Table 29-1, 29-2, or 29-3 of section 22a-174-29 as determined by the "Commissioner". The primary use of this term is in the derivation of the maximum allowable stack concentration for a source.

[(36)] (37) "Incinerator" means 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. For further definitions related to incineration, see subdivision 22a-174-18(c)(1).

[(37)] (38) "Indian Governing Body" means the governing body of any tribe, band or group of Indians which tribe, band or group of Indians is subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

[(38)] (39) "Indian reservation" means any federally recognized reservation established by Treaty, Agreement, Executive Order or Act of Congress.

[(39)] (40) "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; airports and combinations thereof.

[(40)] (41) "Indirect source construction permit" means a permit for the construction of an indirect source which is required to ensure that the proposed indirect source will neither prevent nor interfere, either directly or indirectly, with the attainment or maintenance of any applicable ambient air quality standard.

[(41)] (42) "LAER" or "Lowest Achievable Emission Rate" means the rate of emissions which reflects:

- (A) The most stringent emission limitation which is contained in any state implementation plan for such class or category of stationary source, unless the owner or operator demonstrates to the Commissioner's satisfaction that such limitations are not achievable; or
- (B) The most stringent emission limitation which is achieved in practice by such stationary source or category of stationary source, whichever is more stringent.

In determining LAER the Commissioner may take into account any emission limitation, including a visible emission standard, which R-394 REV. 1/77

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has been established as a permit limitation or demonstrated by a stack test acceptable to the Commissioner. For the purposes of this definition, the Commissioner may exclude any stack 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. In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable standards in Title 40 of the Code of Federal Regulations Part 60 and Part 61, as from time to time may be amended.

[(42)] (43) "Major modification" means a physical change or change in the method of operation of a major stationary source which would result in an increase in potential emissions of any individual air pollutant, equal to or greater than the amount listed in Table 3(k)-1 in section 22a-174-3. For the purposes of this definition:

- (A) a major stationary source of volatile organic compounds shall be considered a major stationary source for ozone; and
- (B) in calculating potential emissions any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the maximum rated capacity shall be treated as part of its design if the limitation or the effect the limitation would have on emissions is federally enforceable.

[(43)] (44) "Major stationary source" means:

- (A) a premise with potential emissions equal to or greater than one hundred (100) tons per year of any individual air pollutant prior to the application for a modification to that stationary source or addition to the premise; or
- (B) a premise with potential emissions equal to or greater than one hundred (100) tons per year of any individual air pollutant after taking into consideration:
 - (i) any increase in potential emissions of fifteen (15) tons per year or more from a proposed modification or the addition of a proposed stationary source; and
 - (ii) any other increases and decreases in potential emissions which the Commissioner determines will occur before the date that the increase from the proposed modification occurs; or
- (C) a physical change or change in the method of operation of a premise which in and of itself has potential emissions greater than or equal to one hundred (100) tons per year of any individual air pollutant; and
- (D) for the purposes of this definition:
 - (i) a "major stationary source" of volatile organic compounds shall be considered a "major stationary source" for ozone; and

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(ii) in calculating potential emissions any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the maximum rated capacity shall be treated as part of its design if the limitation or the effect the limitation would have on emissions is federally enforceable.

[(44)] (45) "Maximum allowable stack concentration" or "MASC" is the maximum allowable concentration of a "hazardous air pollutant" in the exhaust gas stream of a "source" under actual operating conditions at the "discharge point."

[(45)] (46) "Maximum pollutant concentration" means the largest concentration of a specific pollutant in a region or subregion either as a measured or calculated value, as determined by the Commissioner, for the twelve months ending on June 30, 1972. The time periods to be averaged for the purpose of establishing maximum pollutant concentrations shall be as follows: for sulfur oxides, particulate matter, and nitrogen dioxide, one year; for carbon monoxide, eight hours; for photochemical oxidants, one hour; for hydrocarbons, three hours.

[(46)] (47) "Maximum rated capacity" means the design maximum hourly capacity or highest demonstrated hourly capacity, whichever is greater, multiplied by 365 days per year and 24 hours per day.

[(47)] (48) "Maximum uncontrolled emissions" means the rate of emissions for a source, determined before 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 the rate of emissions is calculated using:

- (A) the maximum rated capacity of the source unless the Commissioner determines that the source is physically unable to operate at that capacity or unless the maximum rated capacity is limited by restrictions on production rates, hours of operation, and 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.

[(48)] (49) "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.

[(49)] (50) "Modify" or "modification" means:

(A) making any physical change in, change in the method of operation of, or addition to a stationary source which:

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- (i) increases the potential emissions of any individual air pollutant from a stationary source by five (5) tons per year or more; or
- (ii) increases the maximum rated capacity of the stationary source unless the owner or operator of the stationary source demonstrates to the Commissioner's satisfaction that such increase is less than fifteen percent (15%) and the change or addition does not cause an increase in the actual emissions or the potential emissions; or
- (iii) increases the potential emissions above the levels listed in Table 3(k)-1 of subsection 22a-174-3(k) for the applicable air pollutants fluorides to beryllium inclusive; or
 - (iv) increases the potential emissions of any air pollutant which is federally regulated under the Clean Air Act and which is not listed in Table 3(k)-1 of subsection 22a-174-3(k); or
 - (v) increases maximum uncontrolled emissions from a stationary source by one hundred (100) tons per year or more.

In addition a change in the type fuel used in accordance with a permit or order, or the type of fuel for which the source has provided registration under section 22a-174-2 to the Commissioner shall be considered a modification unless such change is allowed under a permit or other order of the Commissioner either of which is federally enforceable.

- (B) Notwithstanding the above, the following are not modifications unless the stationary source was previously limited by permit conditions or other order of the Commissioner.
 - (i) Any routine maintenance, repair or replacement unless such replacement results in reconstruction as defined in this section; or
 - (ii) A change in the method of operation; or
 - (iii) Any increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility; or
 - (iv) Any increase in hours of operation; or
 - (v) Any change, the sole purpose of which is to bring an existing source into compliance with regulations applicable to such source; or
 - (vi) Relocation of a portable rock crusher with potential emissions of less than fifteen (15) tons per year which has a permit or exemption letter issued by the Commissioner under section 22a-174-3 provided the owner or operator provides written notice to the Commissioner prior to the relocation.

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[(50)] (51) "Multiple-chamber incinerator" means any article, machine, equipment, contrivance, structure or part of a structure used to dispose of combustible refuse by burning, which consists of two or more refractory lined combustion furnaces in series, physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned.

[(51)] (52) "Nearby" has the same meaning as ascribed to that term in Title 40 Code of Federal Regulations Part 51.100(jj).

[(52)] (53) "Netting" means the determination of the increase or decrease, of potential emissions only, from stationary sources on any individual premise which the Commissioner determines will occur before the date that the increase from the proposed modification occurs.

[(53)] (54) "Non-attainment" shall mean that the quality of the ambient air, as determined by the Commissioner, fails to meet any National Ambient Air Quality Standard for a given pollutant for which such standards have been established by the United States Environmental Protection Agency.

[(54)] (55) "Non-attainment area" means a geographic area which has been designated as non-attainment under Title 40 Code of Federal Regulations Part 81 in accordance with the provisions of 42 U.S.C section 7407 (section 107 of the Clean Air Act).

[(55)] (56) "Non-degradation" means that air quality in any region or designated sub-region shall not deteriorate, as defined in this section.

[(56)] (57) "Offset fill pipe" means a fill pipe that has bends or angles such that a straight sleeve cannot be installed.

[(57)] (58) "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

[(58)] (59) "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 an adequate stack or flue.

[(59)] (60) "Operator" means the person or persons who are legally responsible for the operation of a source of air pollution.

[(60)] <u>(61)</u> "Organic compounds" means any chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

[(61)] (62) "Particulate matter" means any material, except water in uncombined form, that is or has been airborne and exists as a liquid or a solid at standard conditions.

[(62)] (63) "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on appendix J of Title 40 Code of Federal Regulations Part 50 and designated in accordance with Title 40 Code of Federal Regulations Part 53 as published in the July 1, 1987 Federal Register or by an equivalent method approved by the SECTION _

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Administrator in accordance with Title 40 Code of Federal Regulations Part 53.

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[(63)] (64) "Permit to construct" means a permit for the construction of a stationary source which is required to ensure:

- (A) that the proposed stationary source will not be in violation of any applicable emissions rate standards imposed by these regulations; and
- (B) that the proposed stationary source will neither prevent nor interfere with the attainment or maintenance of any applicable ambient air quality standards as described in subparagraph 22a-174-3(c)(1)(B).

[(64)] (65) "Permit to operate" means a permit which is required to ensure:

- (A) that the operations of a stationary source will be in compliance with any applicable emissions rate standards or other applicable requirements imposed by these regulations; and
- (B) that the operations of a stationary source will neither prevent nor interfere with the attainment or maintenance of any applicable ambient air quality standards as described in subparagraph 22a-174-3(c)(1)(B); and
- (C) that all the terms of the permit to construct were fulfilled.

[(65)] (66) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this state, any other state, the United States, or political subdivision or agency thereof or any legal successor, representative, agent, or any agency of the foregoing.

[(66)] (67) "Potential emissions" means the rate of emissions from a stationary source, including fugitive emissions to the extent quantified by permit, order or by registration information, after application of air pollution control equipment, of a particular air pollutant such that the rate is equal to or greater than the actual emissions and where the rate of emissions is calculated using:

- (A) the maximum rated capacity of the stationary source, unless the maximum rated capacity is limited by restrictions on production rates, hours of operation, and types of materials processed, stored or combusted either through permit conditions or other order of the Commissioner; and
- (B) information from the [COMPLIATION] 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.

For the purposes of this definition, in calculating\potential emissions in subsections (k) and (l) of section 22a-174-3, subsections 22a-174-8(c) and 22a-174-20(ee) or in the definitions of major modification, major stationary source, netting and commence or commencement, any physical or operational limitation on the capacity

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of the source to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the maximum rated capacity shall be treated as part of its design if the limitation or the effect the limitation would have on emissions is federally enforceable.

[(67)] (68) "Premise" means the grouping of all stationary sources at any one location and owned or under the control of the same person or persons.

[(68)] (69) "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

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(C) the processing of salvageable material by burning.

[(69)] (70) "Reasonable Available Control Technology" means the lowest emission limitation that a particular facility is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar but not necessarily identical source categories.

[(70)] (71) "Reconstruct" or "reconstruction" means the renovation or re-building of a source in accordance with the provisions of Title 40 of the Code of Federal Regulations Part 60.15. A reconstructed source shall be considered a new source for the purposes of these regulations. Use of an alternative fuel or raw material by reason of an order in effect under 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 under section 125 of the Federal Clean Air Act, shall not be considered reconstruction.

[(71)] (72) "Region" means a Connecticut intrastate Air Quality Control Region, or the Connecticut portion of an interstate Air Quality Control Region as defined by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations Part 81.

[(72)] (73) "Remote fill pipe" means an offset fill pipe.

[(73)] (74) "Residual oil" means any fuel oil of No. 4, No. 5, or No. 6 grades, as defined by Commercial Standard C.S. 12-48.

[(74)] (75) "Resources recovery facility" means a facility utilizing processes aimed at reclaiming the material or energy values from municipal solid waste.

[(75)] (76) "Ringelmann chart" means the chart published and described in the U.S. Bureau of Mines Information Circular 8333.

[(76)] (77) "Soiling index" means a measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No. 4 filter

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paper for a measured period of time, expressed as COHs/1,000 linear feet, or equivalent.

[(77)] (78) "Solid waste" means unwanted or discarded materials, including solid, liquid, semisolid, or contained gaseous material.

[(78)] (79) "Source" means any property, real or personal, which emits or may emit any air pollutant.

[(79)] (80) "Stack" means any point of release from a source, which emits solids, liquids, or gases into the ambient air, including a pipe, duct, or flare.

[(80)] (81) "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 mm. Hg.).

[(81)] <u>(82)</u> "State" as used in the phrase "any other state" means state, region, territory, commonwealth, military reservation, or Indian reservation.

[(82)] (83) "State implementation plan" means a plan required by section 110 of the Federal Clean Air Act which has been approved by the Administrator.

[(83)] (84) "Stationary source" means any building, structure, facility, equipment, operation, or installation which is located on one or more contiguous or adjacent properties and which is owned by or operated by the same person, or by persons under common control, which emits or may emit any air pollutant, and which does not move from location to location during normal operation except that portable rock crushers which are moved from site to site but remain stationary during operation and asphalt plants which combine aggregate and asphalt while in motion are stationary sources.

[(84)] (85) "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.

[(85)] (86) "Submerged fill pipe" means any fill pipe the discharge opening of which is still entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

[(86)] (87) "Subregion" means a subdivision of a Region, as determined by the Commissioner.

[(87)] (88) "Tank" means any vessel for containing liquids or gases.

[(88)] (89) "Total suspended particulate" means particulate matter as measured by the method described in Appendix B of Title 40 Code of Federal Regulations Part 50.

[(89)] (90) "Unclassifiable area" means a geographic area which has not been designated either as attainment or non-attainment under Title 40 Code of Federal Regulations Part 81 in accordance with the provisions of section 107 of the Clean Air Act.

[(90)] (91) "Volatile organic compound" means any compound of carbon which participates in atmospheric photochemical reactions excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or

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carbonates, ammonium carbonate and the [following] organic compounds LISTED ON TABLE 1(a)-1 BELOW which the Administrator has designated as having negligible photochemical reactivity [:] .

TABLE 1(a)-1

EXEMPT VOLATILE ORGANIC COMPOUNDS

methane [,]

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ethane [,]

1,1,1 trichloroethane [,] methylene-chloride [,]

dichlorodifluoromethane[,]

DICHLOROTRIFLUOROETHANE

trifluoromethane [,]

trichlorotrifluoroethane [,] dichlorotetrafluoroethane

[and] chloropentafluoroethane [.]

TETRAFLUOROETHANE DICHLOROFLUOROETHANE

CHLORODIFLUOROETHANE

trichlorofluormethane [,]

chlorodifluoromethane [,]

[(91)] (92) "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.

[(92)] (93) "Watercourse" means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, which are contained within, flow through or border upon this state or any portion thereof.

(b) For the purposes of the definitions of "actual emissions" and "potential emissions" in this section, if the "Commissioner" deems certain data or other information more representative, the "Commissioner" shall briefly state the reasons for such determination in writing. If an applicant seeks to have the "Commissioner" determine that certain data or other information is more representative, the burden of establishing that such data is more representative shall be on the applicant.

Statement of Purpose: To amend the regulations for the control of vaolatile organic compounds to make them consistent with minimum federal guidance, to adopt the federal requirements for preconstruction ambient air monitoring and to adopt the federal definitions of "volatile organic compounds" and "begin actual construction".

CERTIFICATION

Be it known that the	foregoing: Page70 of _70 pages
X Regulations	Emergency Regulations
Are:	
Adopt ed	X Amended as hereinabove stated Repealed
By the aforesaid ag	gency pursuant to:
X Section22a-	<u>174</u> of the General Statutes.
Section	of the General Statutes, as amended by Public Act Noof thePublic Acts.
Public Act No	of the Public Acts.
After publicatio	n in the Connecticut Law Journal on <u>May 30</u>
Adopt	X Amend Repeal such regulations
(If applicable): WHEREFORE, the	X And the holding of an advertised public hearing on <u>30th</u> day of <u>June</u> 19 <u>89</u> foregoing regulations are hereby:
🔲 Ado pte d	X Amended as hereinabove stated 🛛 Repealed
Effective :	
X When filed with	the Secretary of the State.
(OR)	
The	day of19
In Witness Whereo	f: Current 10, 1989 SIGNED/ Heart of Board Agency or commission OFFICTAL TITLE, DULY AUTHORIZED
	ney General as to legal sufficiency SIGNED c. 4-169, as amended, C.G.S.: De Achall Assoc. Htty. General
Approved IN	V 0//0/89
Disapproved	Sections 2 and 3 ware Approved
Disapproved in	part, (Indicate Section Numbers disapproved only)
Rejected withou	
By the Legislative Re with Sec. 4-170, as a	gulation Review Committee in accordance DATE SIGNED (Clerk of the Logislative Regulation Review Committee) mended, of the General Statutes. 9/19/89 Juch and
Two certified copies r in accordance with Sec	eceived and filed, and one such copy forwarded to the Commission on Official Legal Publications ction 4–172, as amended, of the General Statutes.
DATE	SIGNED (Secretary of the Stute.)
	INSTRUCTIONS

1. One copy of all regulations for adoption, amendment or repeal, except emergency regulations, must be presented to the Attorney General for his determination of legal sufficiency. Section 4–169 of the General Statutes.

 Seventeen copies of all regulations for adoption, amendment or repeal, except emergency regulations, must be presented to the standing Legislative Regulation Review Committee for its approval. Section 4–170 of the General Statutes.

3. Each regulation must be in the form intended for publication and must include the appropriate regulation section number and section heading. Section 4–172 of the General Statutes.

 Indicate by "(NEW)" in heading if new regulation. Amended regulations must contain new language in capital letters and deleted language in brackets. Section 4–170 of the General Statutes.

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AGENCY FISCAL ESTIMATE OF PROPOSED REGULATION

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AGENCY SUBMITTING REGULATION Department of Environmental Protection TE July 12, 1989
SUBJECT MATTER OF REGULATION Abatement of Air Pollution - Control of Volatile
Organic Compounds
REGULATION SECTION NO. 22a-174-20 STATUTORY AUTHORITY 22a-174
OTHER AGENCIES AFFECTED None
EFFECTIVE DATE USED IN COST ESTIMATE October 1, 1989
ESTIMATE PREPARED BY Phil Florkoski TELEPHONE 566-5024

SUMMARY OF STATE COST AND REVENUE IMPACT OF PROPOSED REGULATION

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Agency	Environmental	Protection	Fund	Affected	General	
			-			

	First Year 19 <u>90</u>	Second Year 1991	Eull Operation 19
Number of Positions Personal Services Other Expenses Equipment Grants	0	0	
Total State Cost (Savings) Estimated Revenue Gain (Loss)	0	0	
Total Net State Cost (Savings)	0	0	

EXPLANATION OF STATE IMPACT OF REGULATION:

This is a technical amendment to meet existing guidance from the U.S. Environmental Protection agency. Current staffing levels will be maintained.

EXPLANATION OF MUNICIPAL IMPACT OF REGULATION :

None. No change in requirements for municipalities.

The following agencies are deleted:

The Connecticut Development Authority and Connecticut Housing Investment Fund as a result of Public Act 88-266, and Veterans' Home and Hospital as a result of Public Act 88-285.

Two agencies names are changed:

The Office of Emergency Management as a result of Public Act 88-135 and The Office of Protection and Advocacy for Persons with Disabilities as a result of Public Act 89-144.

One agency's affiliation is changed:

The Blue Hills Hospital is now listed as an affiliate of the Connecticut Alcohol and Drug Abuse Commission.

Additionally, statutory references are changed in Sections 46a-68-35 and 46a-68-56 of the Regulations of Connecticut State Agencies as a result of the recodification of the General Statutes.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Notice of Intent to Amend Regulations and to Revise the State Implementation Plan for Air Quality

The Commissioner of Environmental Protection hereby gives notice of a public hearing as part of a rulemaking proceeding. The purpose of this proceeding is to amend the Regulations of Connecticut State Agencies concerning abatement of air pollution. The amended regulations along with narrative materials will be submitted to the U.S. Environmental Protection Agency (EPA) for their review and approval as a revision to the State Implementation Plan for air quality (SIP). The public hearing will cover the following topics and proposed revisions to the Regulations of Connecticut State Agencies:

To amend the Regulations of Connecticut State Agencies concerning Abatement of Air Pollution for volatile organic compounds. These amendments include necessary definitions, applicability and exemption levels, recordkeeping and reporting requirements and averaging time periods. In addition, requirements for monitoring of air quality by sources seeking permits to construct are clarified. The purpose of this action is to ensure that Connecticut's programs are consistent with standard guidelines as required by the U.S. Environmental Protection Agency under the Clean Air Act.

All interested persons are invited to express their views and arguments on the proposed revision and regulations. Comments should be submitted to the Air Compliance Unit, Room 144, State Office Building, 165 Capitol Avenue, Hartford, Connecticut 06106. All comments must be received by June 30, 1989.

In addition to accepting written comments, the DEP will also hold the public hearing described below. Persons appearing at the hearing are requested

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to submit a written copy of their statement. However, oral comments will also be made part of the record and are welcome.

June 30, 1988 at 9:30 a.m.

Room 565 of the State Office Building

165 Capitol Avenue, Hartford, Connecticut

Copies of the materials listed above will be available for public inspection during normal business hours at the Air Compliance Unit at the above address beginning on May 30, 1989. Additional copies will also be available at the New London Public Library, Torrington Public Library and at the main branch of the Bridgeport Public Library. For further information contact Phil Florkoski of the Air Compliance Unit at 566-5024.

The authority to adopt this plan and regulations is granted by sections 22a-6 and 22a-174 of the Connecticut General Statutes (CGS). This notice is required by 4-168 and 22a-6 CGS and Title 40 Code of Federal Regulations Part 51.102.

> LESLIE CAROTHERS Commissioner

INSURANCE DEPARTMENT

Notice of Intent to Adopt Regulations

In accordance with subsection (a) of Section 4-168 of the General Statutes, notice is hereby given that the Insurance Commissioner, pursuant to the

SUMMARY OF CHANGES

CONTROL OF VOLATILE ORGANIC COMPOUNDS

The materials contained in this proposed amendment to the Regulations of Connecticut State Agencies affect three sections of the regulations concerning the abatement of air pollution. This summary explains the changes being made in each of those sections.

Part 1 Section 22a-174-20 Control of Volatile Organic Compounds.

As part of their review of the ozone control portion of our Sate Implementation Plan for air quality (SIP), the U.S. Environmental Protection Agency (EPA) identified a series of deficiencies and inconsistencies in our existing regulations. These include definitions, exemptions, compliance periods, test methods, record keeping and variations from EPA model language. Changes are being proposed for each subsection of the current regulations which will bring our regulations into comformance with EPA guidance.

Part 2 Subdivision 22a-174-3(k)(7) Preconstruction Monitoring.

The current version of this subdivision was adopted with an effective date of February 1, 1989 and is pending review and approval by the EPA as part of our State Implementation Plan for air quality. As part of their review, EPA identified inconsistencies between the current requirements and the EPA regulations (40 CFR Part 166(m)). The proposed amendment sets forth requirements for new major sources and "modifications" to provide an analysis of the affect on ambient air by construction of the new or modified source. If needed additional preconstruction monitoring can be required from the applicant. Finally, the Commissioner is given the authority to require monitoring after construction.

Part 3 Section 22a-174-1 Definitions.

As part of this amendment, the definition of "volatile organic compounds" (VOC) is being amended by adding four compounds to the list of materials that are excluded from the definition of VOC. This definition (with the new compounds) is identical to the term as used by the EPA. The addition of these new compounds is consistent with EPA policies dealing with the reduction of certain chloroflurocarbons (CFCs) in order to prevent the depletion of the stratospheric ozone.

In addition, the federal definition of the term "begin actual construction" is adopted. This term is used to determine commencement of construction as part of the program to require permits for new stationary sources.



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



REGULATIONS FOR THE CONTROL OF VOLATILE ORGANIC COMPOUNDS

SUMMARY OF COMMENTS AND RESPONSE OF HEARING EXAMINER

This set of regulations represents a comprehensive revision to the Department of Environmental Protection's (DEP's) program for the control of volatile organic compounds. There are three parts to the final package which amends two sections and one subsection of the Regulations of Connecticut State Agencies concerning Abatement of Air Pollution. This package was developed to comply with the requirements of the U. S. Environmental Protection Agency (EPA) to meet all the guidance provided by EPA. The majority of these changes deal with record keeping requirements. The DEP provided for public input through meetings of the State Implementation Plan Revision Advisory Committee, by conducting a public hearing and by allowing a comment period for submission of written comments. In addition to the public comments the EPA also provided a detailed list of comments and changes which were necessary for this package to be approved as part of the State Implementation Plan for air quality. Most of the changes which were made were required by the EPA. This summary provides a description of comments received and changes made.

1) Daniel Beharry of Cohen & Channin suggested changes to allow a company that becomes subject to a provision of these regulations, soley because the Department has eliminated an exemption based on the size of the company, to have up to twenty-four months to comply.

<u>Response</u> The Department has generally allowed for a reasonable period for sources to comply with new requirements and the elimination of an exemption should be treated in the same fashion. Language has been added to subsections (m) through (v) which will allow a source to have until October 1, 1990 to achieve final compliance for equipment which was not previously included.

2) Mark Sussman of Murtha, Cullina Richter and Pinney was concerned about the requirement of 95% overall control as used in conjunction with emission limits based on a "solids applied" basis in subsection 20(bb) and suggested that the Department retain the flexibility to accept a lower emission limit.

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Phone:

<u>Response</u> The Department has the flexibility to accept a lower emission limit under subdivision 20(cc)(3). The changes to subdivision 20(cc)(3) require that the Commissioner issue an order accepting the lower emission limit and that the order be approved by EPA. Subdivision 20(bb)(3) has been modified to better explain the use of emission limits on a "solids applied" basis and to clarify that sources can either meet the emission limit or use 95% control whichever is less stringent.

3) John Feely of the Risdon Corporation had four comments.

A) Concerning the elimination of the exemption for small metal parts he suggested that the exemption be continued for metal coaters who coat only small parts, that cosmetic containers be excluded or that an individual RACT determination be required.

<u>Response</u> The national guidance provided by EPA does not allow for continued exemption of small parts or cosmetic containers. The existing exemption was one of the deficiencies in the regulations pointed out by EPA. The company apply for an alternative emission limit under subdivision 20(cc)(3) once the operation is covered by the regulations.

B) Suggested changes to the definition of clear coat for certain applications.

Response The regulation was modified to reflect the requested change.

C) Suggested changes to the record keeping requirements to have only those individual operations which must meet the provisions of the regulations maintain records.

Response The intent of the regulation is to apply to the entire facility and not individual operations. The Department needs this information to maintain the emissions inventory.

D) A 24-month timeframe for compliance was suggested.

Response Language has been added to subsection 20(aa) which will allow a source to have until October 1, 1990 to achieve final compliance for newly subject operations.

4) Thomas Gordon III of the Neighborhood Cleaners Association commented on section 22a-174-23 Control of Objectionable Odors.

<u>Response</u> This regulation was not a subject of this hearing. The comments will be passed along to the staff working on that regulation.

5) Comments were received in a June 30, 1989 letter from Region 1 of the U.S. Environmental Protection Agency. There were 55 individual comments which covered 14 pages. The length of these Individual comments which covered 14 pages. The length of these comments are due to the fact that each one had a short explanation and suggested language. Although the suggested changes were often minor or very short, the entire subdivision was repeated to show the suggested change. In addition, comments which pertain to different subsections were repeated in their entirety. In general I recommend that we accept the EPA's comments and make the appropriate changes except as noted below comments and make the appropriate changes except as noted below.

Suggested changes to the definition of "vapor balance system" to require that vapor lines automatically close EPA 1) when disconnected.

Response Language consistent with EPA guidance was added.

- Clarify that the requirements of subdivision 20(a)(8) apply only to floating roofs under 20(a)(2)(A) or 20(a)(2)(D). EPA 2)
- other the include not to Response Changes made as so subparagraphs in subdivision 20(a)(2).
- Specify test method for checking the gap on external EPA 3 floating roof tanks.

Response Test method from EPA guidance was added.

Add operational requirements for internal and external floating roofs consistent with EPA model language. EPA 4)

Response Language from EPA guidance document was inserted.

Add the words "at least" before the "once per year" inspection requirement. Add the words "maintained and" before the word "kept" for the requirement to retain EPA 5) records for two years.

Response The two changes were made.

Add a requirement that records of tank inspections are EPA 6) retained for two years.

Response Language from EPA's model regulation was added.

Suggested record keeping requirement organic compounds other than gasoline. for volatile EPA 7)

Response Requirement added for volatile organic compounds with a true vapor pressure in excess of 1.0 psi.

Clarify that all the requirements of subdivisions 20(b)(1) and 20(b)(2) apply to subject terminals. EPA 8)

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Response References to those subdivisions were added.

- EPA 9) Suggested changes to the definition of "loading facility" to be consistent with EPA guidance.
- Response The applicability statement that all must be within a three hundred foot circle was eliminated, making the definition acceptable to EPA.
- EPA 10) Ensure that vapor balance requirements apply to unloading as well as loading at bulk terminals.

Response References to unloading were added.

- EPA 11) Change the word "month" to "thirty (30) day period" in determining the requirements for Stage I vapor recovery.
- Response Because the time period is a thirty day running average the change was made.
- EPA 12) Require that there be no leaks during loading and unloading of gasoline tank trucks in subdivision 20(b)(7).
- Response Although the current regulation does have such a provision, changes were made to make the regulation consistent with EPA model language.
- EPA 13) Require that hatches on tank trucks be closed during unloading as well as loading operations.
- Response The phrase "and unloading" was added.
- EPA 14) Clarify that tank trucks which receive gasoline from terminals subject to the provisions of subdivision 20(b)(4) must also use Stage I vapor recovery.

Response Appropriate reference was added.

EPA 15) Update—the reference to the test method in subparagraph 20(b)(1)(A) by deleting the Federal Register citation and adding the Code of Federal Regulations citation.

Response Citation was added.

- EPA 16) Specify the use of EPA test procedure in subparagraph 20(b)(14)(B).
- <u>Response</u> Citation was added along with a requirement that there be no visible liquid leaks.
- EPA 17) Clarify that the efficiency requirements, for control systems approved by the Commissioner, are equal to a vapor recovery system.

Response Suggested language was added.

- EPA 18) In subdivision 20(i)(4) change the word "nonreactive" to "reactive".
- Response This is consistent with other changes made in this subsection.
- EPA 19) In subdivision 20(1)(1) the definition of "freeboard height" should be clarified.
- Response Model language for cold conveyorized and vapor conveyorized degreasers was added.
- EPA 20) Suggested that the implementation dates in subdivisions 20(1)(3), 20(1)(4) and 20(1)(5) not be eliminated.
- Response Implementation date of July 1, 1980 was retained for existing requirements. Language was added to ensure that new requirements will have a future compliance date.
- EPA 21) Add the phrase "whichever is longer" to the requirement for draining parts in subparagraph 20(1)(3)(E).

Response Clarification was made.

- EPA 22) In subparagraph 20(1)(3)(G), specify a minimum efficiency requirement.
- Response Efficiency equal to refrigerated chiller or carbon absorption is now required.
- EPA 23) Require that a record of the monthly solvent usage be maintained for two years.

Response Model language was added.

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- EPA 24) Set a design standard for covers on open top vapor degreasers with lip exhausts.
- Response Standard was added to subsection 20(1)(4).
- EPA 25) Clarify the function of certain safety switches.

<u>Response</u> Model language was added in subparagraph 20(1)(4)(B).

EPA 26) In subparagraph 20(1)(4)(C), specify a minimum efficiency requirement.

Response Efficiency equal to carbon absorption is now required.

EPA 27) In subparagraph 20(1)(4)(J) require that any spraying be done "within" not "below" the vapor zone.

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Response Change made.

- EPA 28) Require that a record of the monthly solvent usage be maintained for two years.
- Response Model language was added.
- EPA 29) In subparagraph 20(1)(5)(A), specify a minimum efficiency requirement.

Response Efficiency equal to carbon absorption is now required.

EPA 30) Clarify the function of certain safety switches.

Response Model language was added in subparagraph 20(1)(5)(B).

EPA 31) Require that a record of the monthly solvent usage be maintained for two years.

Response Model language was added.

- EPA 32) Suggested changes in the definition of "interior base coating".
- Response Change clarifies that this coating is applied to sheets of metal before a can is formed.
- EPA 33 to EPA 40) Add the phrase "which is or becomes" before the word "subject" in the applicability subdivisions of 20(m) to 20(s).
- Response This change will ensure that, after the effective date of these regulations, sources which become subject to the provisions of these regulations will always be subject.
- EPA 41) In subdivision 20(t)(6) change the word "unless" to "except when".
- Response Change was made.
- EPA 42) Change the applicability requirements in subdivision 20(t)(8) to a vent by vent basis instead of a plant wide requirement.
- Response Change was made so that the standards apply to individual operations and not the entire facility.
- EPA 43) Replace the words "up to" with "at least" in subparagraph 20(u)(2)(A) for determining capture efficiency.

Response Change was made.

EPA 44) Set averaging periods for control devices required in subsection 20(u).

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Response Time periods consistent with EPA guidance were added.

EPA 45) In subsection 20(v) require that each and every ink comply with the requirements.

Response Sample language was added.

EPA 46) Clarify the requirements for capture efficiency in subdivision 20(v)(3).

Response The appropriate citation was added.

EPA 47) Set averaging periods for control devices required in subsection 20(v).

Response Time periods consistent with EPA guidance were added.

- EPA 48) Change the applicability requirements in subdivision 20(v)(4) to a line by line basis instead of a plant wide requirement.
- Response Change was made so that the standards apply to individual printing lines and not the entire facility.
- EPA 49) Correct the internal citations which reference the test methods required.
- Response Corrections were made.
- EPA 50) Require that exemptions for safety requirements be approved by the Commissioner.
- Response Requirement added.

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- EPA 51) Require that production rates used during testing be approved by the Commissioner.
- Response A reference to the requirements for testing in section 22a-174-5 was added.
- EPA 52) Suggested changes in language to make the record keeping requirements of subsection 20(aa) consistent with recent EPA guidance.
- Response Changes clarify the type of information needed to determine compliance.
- EPA 53) EPA: provide a list of changes needed in the area of record keeping gasoline terminals and gas stations; suggested test methods for surface coating and capture efficiency; listed monitoring requirements for add-on controls; and suggested a compliance schedule for smaller sources now subject to the regulations.

- Response The record keeping requirements were added. Requirements for the use of EPA test methods to determine volatile content and capture efficiency were added. Monitoring and record keeping requirements for add-on controls were included, but only for "major stationary soures". Smaller sources may be required to install monitors as part of a future rulemaking proceeding. Provisions for a one year period for new subject sources to comply were included.
- EPA 54) Clarify that the exemption provisions of subdivision 20(ee)(3) apply only to those sources which have not had emissions in excess of 100 tons per year since 1980.

Response Model language was added.

EPA 55) Clarify that a public hearing is mandatory under subsection 20(ee).

Response Suggested change was made.

6) Additional comments. At the public hearing there were some questions regarding the use of Table 20(bb)-1 to determine emission reductions needed from add-on controls in order to be equivalent to the reductions obtained when using a complying coating on a solids applied basis.

Response Changes were made to better describe how to perform the necessary calculations.

FINAL RECOMMENDATION

Based on a review of the proposed regulations and the comments received regarding the regulations, I recommend that the final regulation be submitted for adoption in accordance with the requirements of the Uniform Administrative Procedures Act.

July 6, 1989 Date

Leonard Bruckman Hearing Officer