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TITLE 250 - DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 120 – AIR RESOURCES

SUBCHAPTER 05 - AIR POLLUTION CONTROL

PART 15 - Control of Organic Solvent Emissions

15.1 Purpose and Authority

15.1.1 Purpose

The purpose of this regulation is to limit emissions of volatile organic compounds from stationary sources of air contaminants.

15.1.2 Authority

These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(19) and R.I. Gen. Laws Chapter 23-23, and have been promulgated pursuant to the procedures set forth in the R.I. Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.

15.2 Application

The terms and provisions of this regulation shall be liberally construed to permit the Department to effectuate the purposes of state laws, goals and policies.

15.3 Severability

If any provision of this regulation or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the regulation shall not be affected thereby.

15.4 Incorporated Materials

These regulations hereby adopt and incorporate 40 C.F.R. § 60 Appendix A-7 Methods 24 and 25 (2018) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

15.5 Definitions

A. Unless otherwise expressly defined in this section, the terms used in this regulation shall be defined by reference to Part 0 of this Subchapter (General

Definitions). As used in this regulation, the following terms shall, where the context permits, be construed as follows:

1. "Volatile Organic Compound" or "VOC" means "Volatile Organic Compound and Halogenated Organic Compound" or "VOC and HOC" in §§ 15.6 and 15.7 of this Part.

15.6 Applicability and Exceptions

- A. This regulation applies to all facilities which have or have had VOC emissions from all pollutant-emitting equipment or activities of at least fifty (50) tons per year potential emissions of VOC.
- B. The RACT requirements in § 15.7 of this Part do not apply to:
 - 1. Equipment and pollutant-emitting activities that are regulated by Part 11 of this Subchapter (Petroleum Liquids Marketing and Storage), Part 19 of this Subchapter (Control of Volatile Organic Compounds from Surface Coating Operations), Part 21 of this Subchapter (Control of Volatile Organic Compound Emissions from Printing Operations), Part 22 of this Subchapter (Air Toxics), Part 25 of this Subchapter (Control of Volatile Organic Compound Emissions from Cutback and Emulsified Asphalt), Part 26 of this Subchapter (Control of Organic Solvent Emissions from Manufacturers of Synthesized Pharmaceutical Products), Part 30 of this Subchapter (Control of Volatile Organic Compounds from Automobile Refinishing Operations), Part 32 of this Subchapter (Control of Volatile Organic Compounds From Marine Vessel Loading Operations), Part 35 of this Subchapter (Control of Volatile Organic Compounds and Volatile Hazardous Air Pollutants from Wood Products Manufacturing Operations). Part 36 of this Subchapter (Control of Emissions from Organic Solvent Cleaning), and Part 44 of this Subchapter (Control of Volatile Organic Compounds from Adhesives and Sealants) or which have been determined to be BACT or LAER in a permit issued by the Office of Air Resources after November 15 1990, pursuant to Part 9 of this Subchapter (Air Pollution Control Permits);
 - 2. The spraying or other employment of insecticides, pesticides or herbicides; and
 - 3. The blending of distillate or residual fuel oils.

15.7 Emission Limitations

A. Any facility which has or ever has had potential emissions of VOC of fifty (50) tons/year or more, as defined in Part 0 of this Subchapter (General Definitions), from equipment not specifically controlled by any other VOC regulation, shall

install and operate in compliance with RACT, as specified in an enforceable document issued by the Director.

B. Facilities using add on controls to comply with RACT must show that the equipment meets specific capture and control performance standards which will be set in an enforceable document. Control efficiency of the equipment will be determined using EPA-approved test methods. Calculations will be done on a solids basis. Continuous compliance will be maintained at all times. Compliance averaging times will be met according to the control device chosen and EPA test methods (as codified in 40 C.F.R. § 60, Appendix A), incorporated in § 15.4 of this Part, as follows:

Compliance Method	EPA Reference Test Method	Test Averaging Time
Reformulation	24	Instantaneous
Solvent destruction or solvent recovery except carbon adsorption	25	3 hours
Carbon adsorption	25 or other test method as appropriate	7-day rolling average

- C. Or other methods approved by the Director and EPA. Once the control efficiency has been determined for any add-on control device by Reference Method 25, or any alternative method approved by the Department and EPA, compliance shall be determined on an instantaneous basis (e.g. determined control efficiency shall be used to calculate whether samples from the process meet the applicable emissions limit.)
- D. The owner or operator of a facility using carbon adsorption as a control measure shall obtain data on daily solvent usage and solvent recovery and determine the solvent recovery efficiency of the system every day. The recovery efficiency for each day shall be computed as the ratio of the total recovered solvent for that day and the prior six (6) consecutive operating days to the total solvent usage for the same seven-day period. This ratio shall be expressed as a percentage. Facilities may apply to the Director for an alternative averaging time if meeting the emission limitation as a seven-day rolling average is not technically or economically feasible. In no event shall the averaging period exceed a 30-day rolling period. All alternative averaging periods must be consistent with EPA guidance.
- E. Every two (2) years, a facility may be required to undergo RACT review at the discretion of the Department.

- F. Any facility which is subject to the requirements of § 15.7(A) of this Part, but has not been required to install and operate in compliance with RACT shall, within six (6) months after becoming a fifty (50) ton per year potential VOC source, submit to the Director a RACT proposal for approval which includes all information specified in § 15.7(G) of this Part.
- G. All RACT proposals submitted to comply with § 15.7(F) of this Part shall include the following information:
 - 1. An inventory of all VOC-emitting equipment at the facility;
 - 2. An inventory of all VOC-emitting equipment at the facility not exempted from the RACT requirement of this section according to § 15.6(B) of this Part;
 - 3. Identification of any additional VOC-emitting activities at the facility;
 - 4. The maximum capacity of each piece of VOC-emitting equipment not exempted under § 15.6(B) of this Part;
 - 5. The actual maximum amount of VOC emitted each in any day from each piece of VOC-emitting equipment at the facility not exempted under § 15.6(B) of this Part;
 - 6. An examination of the technical and economic feasibility of installing addon VOC control equipment to control emissions from each piece of VOC equipment not exempted under § 15.6(B) of this Part;
 - 7. An examination of the technical and economic feasibility of reducing VOC use in each piece of equipment not exempted under § 15.6(B) of this Part and in any additional VOC-emitting activities at the facility;
 - 8. An examination of the technical and economic feasibility of using different process equipment or different processes to reduce VOC use or emissions not exempted under § 15.6(B) of this Part;
 - 9. The control option or combination of control options selected, including emission limits and the test methods to demonstrate compliance;
 - 10. The amount of reduction in VOC emissions that will be associated with implementing the selected control option;
 - 11. A schedule for implementation, including a demonstration of compliance;
 - 12. A means of assessing continuous compliance, including test methods, monitoring devices and reporting requirements;

- A description of future research that will be conducted by the owner or operator to further reduce VOC emissions beyond the level of emissions proposed; and
- 14. Any additional information requested by the Director that is deemed necessary to determine RACT.
- After reviewing a RACT proposal, the Department, in consultation with the EPA, Η. shall prepare a proposed enforceable document specifying RACT for the facility. The enforceable document shall be subject to a 30-day public comment period. A public hearing for interested persons to appear and to submit written or oral comments on the enforceable document shall be held upon request. The Director may also hold a hearing at their discretion, whenever they believe there is a significant degree of public interest in the proposed action. If held, a hearing shall take place no earlier than thirty (30) days nor later than sixty (60) days following initial public notice. Comments from the applicant and/or any interested persons shall be recorded at the public hearing. Written comments, to be considered part of the record, shall be submitted during the public comment period, which commences on the date of initial public notice and extends until close of business on the day of the public hearing. The final enforceable document shall be submitted to the EPA for approval as a source specific revision to the State Implementation Plan.
- I. Any facility which is subject to the requirements of § 15.7 of this Part and did not submit a RACT proposal as required by § 15.7(F) of this Part, shall comply with one of the following requirements:
 - 1. Install and operate an air pollution control system which controls emissions from each piece of VOC-emitting equipment and each VOC-emitting activity not exempt under the provisions of § 15.6(C) of this Part by reducing inlet emissions by at least ninety-five percent (95%) and which is designed to capture and control VOC emissions to obtain an overall reduction efficiency of eighty-five percent (85%) on a daily basis; and submit the following information to the Office of Air Resources:
 - a. An inventory of all VOC-emitting equipment at the facility;
 - b. An inventory of all VOC-emitting equipment at the facility not exempt under § 15.6(B) of this Part;
 - c. The maximum capacity of each piece of VOC-emitting equipment at the facility not exempt under § 15.6(B) of this Part;
 - d. The actual amount of VOC emitted each day from each piece of VOC-emitting equipment at the facility not exempt under § 15.6(B) of this Part;

- e. A description of the proposed VOC emission capture and control system;
- f. A permit application as required by § 9.7 of this Subchapter, if applicable;
- g. Testing procedures, monitoring procedures, and recordkeeping and reporting procedures which will be used to demonstrate, to the satisfaction of the Director and EPA, compliance with this section; and
- h. A schedule of implementation, including a demonstration of compliance; or
- 2. Implement a program to reduce daily VOC use and VOC emissions, such that actual VOC emissions from all VOC-emitting activities and equipment not exempted by the provisions of § 15.6(B) of this Part do not exceed twenty percent (20%) of the daily VOC emissions from that equipment and those activities during each day of the calendar year the source becomes a potential fifty (50) ton per year VOC source, calculated on either a mass of VOC per mass of solids applied basis if the affected VOC emitting equipment applies to surface coating, or a mass of VOC per unit of production basis. The following information shall be submitted:
 - a. An inventory of all VOC-emitting equipment at the facility;
 - b. An inventory of all VOC-emitting equipment at the facility not exempt under § 15.6(B) of this Part;
 - c. The maximum capacity of each piece of VOC-emitting equipment at the facility not exempt under § 15.6(B) of this Part;
 - d. The actual amount of VOC emitted each day from each piece of VOC-emitting equipment at the facility not exempt under § 15.6(B) of this Part;
 - e. A calculation of the average daily VOC emissions in the calendar year the source became a potential fifty (50) ton per year VOC source, stated in terms of either mass of VOC emitted per mass of solids applied or mass of VOC emitted per unit of production;
 - f. A calculation of the average daily VOC emissions anticipated upon implementation of the VOC use and reduction plan, stated in terms of either mass of VOC emitted per mass of solids applied or mass of VOC emitted per unit of production;

- g. Testing procedures, monitoring procedures, and recordkeeping and reporting procedures to demonstrate, to the satisfaction of the Director and EPA, compliance with this section; and
- h. A schedule of implementation, including a demonstration of compliance.