Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 19 Volatile Organic Compounds from Specific Processes

30. Control of Volatile Organic Compounds from Chemical Production and Fluoropolymer Material Installations.

A. Definitions. In this regulation, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Back-up control device" means a control device that is used when the primary control device is not available for use.

(2) "Chemical intermediate" means a synthesized chemical that is further processed to produce a final chemical product.

(3) "Control device" means equipment that is used primarily to destroy or reduce VOC emissions before they are discharged into the atmosphere.

(4) "Dipping trough" means a component of an FPM shaping and forming process consisting of a shallow pan containing VOC that is used to maintain flexibility of the FPM product.

(5) "Fluoropolymer material (FPM)" means an inert fluorinated chemical that includes polytetrafluoroethylene or similar materials and is processed with other materials to produce products that are temperature resistant, chemically inert, and weather durable.

(6) "FPM coating installation" means an installation that applies a coating to FPM or an FPM product.

(7) FPM Process Installation.

(a) "FPM process installation" means an installation that treats FPM so that its shape or form is permanently changed and that results in VOC emissions into the air.

(b) "FPM process installation" does not include an FPM coating installation.

(8) Inorganic Chemical Production Installation.

(a) "Inorganic chemical production installation" means process equipment used for the production of inorganic chemicals when associated with drying or product treatment equipment that involves the use of VOCs. (b) "Inorganic chemical production installation" does not include an FPM installation.

(9) "Organic chemical production installation" means process equipment that operates independently or in combination with other equipment including reactors, distillation columns, evaporators, strippers and other similar chemical processing equipment to produce a single chemical intermediate or final product.

(10) Product Condenser.

(a) "Product condenser" means chemical processing equipment that is used to condense process vapors and return the condensate to the process for the primary purpose of maintaining process conditions, product quality, safe operations, or economic benefit.

(b) A "product condenser" that is part of an organic chemical production installation or inorganic chemical production installation is not considered a control device.

(11) "Total actual uncontrolled VOC emissions" means the actual VOC emissions from an installation or the VOC emissions from an installation without considering controls.

C. Applicability.

(1) Section D of this regulation applies to a person who owns or operates an organic chemical production installation or an inorganic chemical production installation at a premises that, on any day, has actual uncontrolled VOC emissions of 20 pounds or more per day.

(2) A person who owns or operates an installation subject to the requirements in this regulation is not, for that installation, subject to any other regulation included under:

(a) This chapter, except Regulations .01, .02, and .16 of this chapter;

(b) COMAR 26.11.35, if monthly records are maintained to demonstrate that VOC emissions from:

(i) The application of all adhesives, sealants, adhesive primers, and sealant primers do not exceed 400 pounds per year; and

(ii) Adhesive manufacturing do not exceed 200 pounds per year.

(3) Section E of this regulation applies to a person who owns or operates an FPM process installation or FPM coating installation that, on any day, has total actual uncontrolled VOC emissions of 20 pounds or more.

D. General Requirements for Organic Chemical Production Installations and Inorganic Chemical Production Installations.

(1) A person who owns or operates an organic chemical production installation or an inorganic chemical production installation at a premises that has total uncontrolled VOC emissions of 100 pounds or more per day shall duct each process vent and exhaust line from any installation with actual emissions of 20 pounds or more per day into a control device that has a VOC destruction or removal efficiency of at least 90 percent, overall.

(2) A person who owns or operates an organic chemical production installation or an inorganic chemical production installation at a premises that has total uncontrolled VOC emissions of 20 pounds or more per day, but less than 100 pounds per day, shall prepare a manual that identifies good operating practices and procedures that are designed to minimize emissions of VOC from the premises.

(3) The good operating practices and procedures required in §D(2) of this regulation shall be implemented by March 30, 2002, and made available to the Department upon request.

(4) A person who owns or operates an organic chemical production installation and complies with D(1) of this regulation and later cannot achieve compliance because of an unavoidable outage or malfunction of the primary control device shall either:

(a) Discontinue operation until the primary control device is returned to proper service; or

(b) Use a back-up control device that is approved by the Department.

(5) The back-up control device under D(4)(b) of this regulation may not be used more than 10 percent of the annual operating time of the affected installation during any calendar year unless a longer period is approved by the Department.

E. General Requirements for FPM Process Installations.

(1) A person who owns or operates an FPM process installation that has actual uncontrolled VOC emissions of 50 pounds or more per day shall vent the emissions into a thermal oxidizer system or other control method approved by the Department to destroy or reduce VOC emissions by 85 percent or more, overall.

(2) If a thermal oxidizer is installed, the oxidizer combustion chamber shall be:

(a) Operated at a minimum combustion chamber temperature of 1400° F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation;

(b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and

(c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved temperature; and

(d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating.

(3) If a source uses an alternative control method approved by the Department, the alternative control method shall be monitored as required by the Department.

(4) Equipment that is installed for the purpose of treating emissions or monitoring shall be operated, maintained, and as applicable, calibrated in accordance with the equipment vendor's specifications.

(5) A person who owns or operates an FPM compounding and tape or shape-forming installation shall minimize fugitive emissions of VOC by:

(a) Immediately enclosing all wet FPM during storage; and

(b) Covering dipping troughs when not in operation.

(6) A person who owns or operates an FPM coating installation that has actual uncontrolled VOC emissions of 20 pounds or more per day may not use a coating that has a VOC content exceeding 2.9 pounds per gallon unless the installation is equipped with a control device that meets the requirements in E(2), (3), and (4) of this regulation.

F. Demonstration of Compliance. Compliance with this regulation shall be demonstrated using the applicable VOC test methods specified in COMAR 26.11.01.04C or other test method approved by the Department.