

Control of emissions of organic materials from stationary sources.**(A) Applicability.**

(1) Except as provided in paragraph (A)(2) of this rule, the requirements of this rule are applicable to all existing stationary sources located within a "Priority I" county as indicated in paragraph (A) of rule 3745-21-06 of the Administrative Code and to all new stationary sources regardless of location.

(2) The requirements of this rule shall not apply to the following sources:

(a) Sources which are in compliance with or specifically exempted from the applicable requirements of rule 3745-21-09 of the Administrative Code; and

(b) Sources which are not in compliance with the applicable requirements of rule 3745-21-09 of the Administrative Code where the owner or operator of said sources has:

(i) Complied with the requirements of paragraph (B)(1) of rule 3745-21-04 of the Administrative Code; and

(ii) Demonstrated to the satisfaction of the director that compliance with the requirements of rule 3745-21-07 of the Administrative Code would conflict with the achievement of compliance with the applicable requirements of rule 3745-21-09 of the Administrative Code.

(c) Sources which are located in Darke, Fairfield, Madison, Perry, Pickaway, Preble and Union counties and which are located at a facility having the potential to emit not more than one hundred tons of organic compounds per calendar year.

(B) Except as otherwise provided in this rule, all new stationary emission sources of photochemically reactive materials shall minimize such emissions by use of the latest available control techniques and operating practices in accordance with best current technology.

(C) Nothing in this rule shall be construed to preclude the use of alternative means to abate emissions, if such alternative is approved by the director and will not result in emissions significantly greater than would result from the application of the means specified herein.

(D) Storage of volatile photochemically reactive materials:

(1) No person shall place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile

photochemically reactive material unless such 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 equipment:

- (a) A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place; or
 - (b) A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety per cent by weight. All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place; or
 - (c) Other equipment or means of air pollution control as may be approved by the director.
- (2) No person shall place, store, or hold in any stationary storage vessel of more than five hundred gallons capacity any volatile photochemically reactive material unless such vessel is equipped with a permanent submerged fill pipe, is loaded through the use of a portable loading tube which can be inserted below the liquid level line during loading operations, or is a pressure tank as described in paragraph (D)(1) of this rule or is fitted with a vapor recovery system as described in paragraph (D)(1)(b) of this rule.
- (E) Volatile photochemically reactive materials loading facilities:
- (1) No person shall load in any one day more than forty thousand gallons of any volatile photochemically reactive material into any tank truck, trailer, or railroad tank car from any loading facility unless the loading facility is equipped with a vapor collection and disposal system properly installed, in good working order, in operation, and consisting of one of the following:
 - (a) An adsorber system or condensation system which processes and recovers at least ninety per cent by weight of all vapors and gases from the equipment being controlled; or
 - (b) A vapor handling system which directs all vapors to a fuel gas system; or
 - (c) Other equipment or means for purposes of air pollution control as may be acceptable to and approved by the director.

- (2) All loading from facilities subject to the provisions of paragraphs (E)(1)(a) and (E)(1)(b) of this rule shall be accomplished in such a manner that all displaced vapors and gases shall be vented only to the vapor collection system. A means shall be provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.
- (F) No person shall use any compartment of any vessel or device operated for the recovery of volatile photochemically reactive materials from an effluent water separator which recovers two hundred gallons a day or more of any volatile photochemically reactive material unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:
- (1) A solid cover with all openings sealed and totally enclosing the liquid contents of the compartment. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; or
 - (2) A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; or
 - (3) A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety per cent by weight. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; or
 - (4) Other equipment or means of air pollution control as may be approved by the director.
- (G) Operations using liquid organic material:
- (1) A person shall not discharge more than fifteen pounds of organic materials into the atmosphere in any one day, nor more than three pounds in any one hour, from any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material 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 eighty-five per cent.
 - (2) A person shall not discharge more than forty pounds of organic material into the atmosphere in any one day, nor more than eight pounds in any one hour, from any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance

containing such photochemically reactive material, unless said discharge has been reduced by at least eighty-five per cent.

- (3) Any series or articles, machines, equipment or other contrivances designed for processing a continuously moving sheet, web, strip, or wire which is subjected to any combination or operations described in paragraph (G)(1) or (G)(2) of this rule involving any photochemically reactive material, shall be subject to compliance with paragraph (G)(2) of this rule. Where only nonphotochemically reactive materials are employed or applied, and where any portion or portions of said series of articles, machines, equipment, or other contrivances involves operations described in paragraph (G)(1) of this rule, said portions shall be collectively subject to compliance with paragraph (G)(1) of this rule.
- (4) Emissions of organic material to the atmosphere from the cleanup with photochemically reactive materials of any article, machine, equipment, or other contrivance described in paragraph (G)(1), (G)(2), or (G)(3) of this rule, shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivance for determining compliance with this rule.
- (5) Emissions of organic materials to the atmosphere resulting from air or heated drying of products for the first twelve hours after their removal from any article, machine, equipment, or other contrivance described in paragraph (G)(1), (G)(2), or (G)(3) of this rule shall be included with other emissions of organic materials from that article, machine, equipment, or other contrivance, for determining compliance with this rule.
- (6) Emission of organic materials into the atmosphere required to be controlled by paragraph (G)(1), (G)(2), or (G)(3) of this rule, shall be reduced by:
 - (a) Incineration, provided that ninety per cent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or
 - (b) Adsorption, or
 - (c) Processing in a manner determined by the director to be not less effective than the methods specified in paragraph (G)(6)(a) or (G)(6)(b) of this rule.
- (7) A person incinerating, adsorbing, or otherwise processing liquid organic materials pursuant to this rule shall provide, properly install, and maintain in calibration, in good working order and in operation, devices as specified in the authority to construct or the permit to operate, or as specified by the director, for indicating temperatures, pressures, rate of flow, or other operating conditions necessary to determine the degree and effectiveness of air pollution control.

- (8) Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.
- (9) The provisions of paragraph (G) of this rule shall not apply to:
- (a) The use of equipment for which other requirements are specified by paragraphs (D), (E), and (F) of this rule, or which are exempt from air pollution control requirements by said paragraph.
 - (b) The spraying or other employment of insecticides, pesticides, or herbicides.
 - (c) The use of any material, in any article, machine, equipment, or other contrivance described in paragraph (G)(1), (G)(2), (G)(3), or (G)(4) of this rule, if:
 - (i) The volatile content of such material consists only of water and liquid organic material, and
 - (ii) The liquid organic material comprises not more than twenty per cent of said volatile content, and
 - (iii) The volatile content is not a photochemically reactive material.
 - (d) The use of any material, in any article machine, equipment or other contrivance described in paragraph (G)(1), (G)(2), (G)(3) or (G)(4) of this rule, if:
 - (i) The volatile content of such material does not exceed twenty per cent by volume of said material, and
 - (ii) The volatile content is not a photochemically reactive material.
 - (e) The use, in any article, machine, equipment, or other contrivance described in paragraph (G)(1), (G)(2), (G)(3), or (G)(4) of this rule, of liquid organic materials which exhibit a boiling point higher than 200 degrees Fahrenheit at 0.5 millimeter mercury absolute pressure, or having an equivalent vapor pressure, unless such liquid organic material is exposed to temperatures exceeding 220 degrees Fahrenheit.
 - (f) The use of any material, in any article, machine, equipment or other contrivance described in paragraph (G)(1), (G)(2), (G)(3), or (G)(4) of this rule, if it can be demonstrated to the director's satisfaction that the emissions of organic materials into the atmosphere from such article, machine, equipment, or other contrivance are not photochemically reactive.

- (g) Any emissions unit that is a new source, as defined by rule 3745-31-01 of the Administrative Code, and meets the following requirements:
- (i) The director has determined that best available technology for the emissions unit, as required by rule 3745-31-05 of the Administrative Code, is a control requirement or emission limitation that is either less stringent than or inconsistent with the requirements of paragraph (g) of this rule. Best available technology shall be defined in accordance with division (f) of section 3704.01 of the Revised Code and, for purposes of this paragraph, shall provide, where an emission limitation is applicable, the lowest emission limitation that the emissions unit is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. Also, for an emissions unit located within an ozone nonattainment area, the best available technology determination must comply with section 193 (General Savings Clause) of the Clean Air Act Amendments of 1990.
 - (ii) The U.S. environmental protection agency has informed the Ohio EPA, in writing, prior to the issuance of a final permit to install for the emissions unit, that the agency has no objection to the issuance of the final permit and the control requirement or emission limitation specified therein.
 - (iii) A final permit to install has been issued for the emissions unit pursuant to Chapter 3745-31 of the Administrative Code. The permit to install shall contain terms and conditions that specify the control requirement or emission limitation that is the basis for the director's best available technology determination for the emissions unit, as described in paragraph (G)(9)(g)(i) of this rule, and the permit to install shall be issued by the Ohio EPA in a manner that makes the control requirement or emission limitation federally enforceable.
- (h) The use of a phenolic urethane cold box resin binder system in foundry core-making and mold-making operations, provided the catalyst gas emissions are vented to either a sulfuric acid scrubber that is designed and operated to remove at least ninety-eight per cent, by weight, of the catalyst gas emissions or a control device that is designed and operated with an equivalent removal efficiency for the catalyst gas emissions. (In a phenolic urethane cold box resin binder system, sand is mixed with a two-part liquid urethane resin binder, and a catalyst gas is blown into the resin-coated sand to cause hardening.)
- (i) The use of a phenolic urethane no-bake resin binder system in foundry core-making and mold-making operations. (In a phenolic urethane no-bake resin

binder system, sand is mixed with a two-part liquid urethane resin binder and a liquid catalyst, which regulates the speed of the resin curing reaction.)

(H) (Reserved)

(I) Disposal and evaporation of solvents:

A person shall not, during any one day, dispose of a total of more than 1.5 gallons of any volatile photochemically reactive material, or dispose of any substance containing more than 1.5 gallons of any volatile photochemically reactive material, by any means which will permit the evaporation of such volatile photochemically reactive material into the atmosphere.

(J) Waste gas disposal:

- (1) No person shall emit a waste gas stream from any ethylene producing plant or other ethylene emission source into the atmosphere unless the waste gas stream is properly burned at 1300 degrees Fahrenheit for 0.3 seconds or greater in a direct-flame afterburner or equally effective control equipment as may be approved by the director.
- (2) No person shall emit organic materials into the atmosphere from a waste gas flare system unless such materials are burned by smokeless flares, or an equally effective control equipment as approved by the director.
- (3) The provisions of paragraphs (J)(1) and (J)(2) of this rule shall not apply to emissions from emergency relief and vapor blowdown systems. Emissions from emergency relief and vapor blowdown systems shall be controlled upon special order of the director by burning by smokeless flare, or equally effective control equipment as may be approved by the director.

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Original signed by Christopher Jones, Director, Ohio EPA
Certification

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