

Chapter NR 419

CONTROL OF ORGANIC COMPOUND EMISSIONS

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Note: Corrections made under s 13-93 (2m) (b) 7, Stats., Register, December, 1996, No. 492.

NR 419.01—Applicability; purpose. (1) APPLICABILITY This chapter applies to all air contaminant sources which emit organic compounds and to their owners and operators.

(2) PURPOSE This chapter is adopted under ss. 285.11, 285.13 and 285.17, Stats., to categorize organic compound air contaminant sources and to establish emission limitations for these categories in order to protect air quality.

History: Cr Register, September, 1986, No. 369, eff. 10-1-86; am Register, February, 1990, No. 410, eff. 3-1-90.

NR 419.02 Definitions. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter and in chs. NR 420 to 425:

(1) “Adsorption system” means a device containing adsorbent material (e.g., activated carbon, alumina, silica gel); an inlet and outlet for exhaust gases; and a system to regenerate the saturated adsorbent.

(2) “Automobile” means passenger cars, vans, motorcycles, trucks, or any equipment that is physically capable of being driven or drawn upon a highway including, but not limited to, the following types of equipment: construction vehicles such as mobile cranes, bulldozers or concrete mixers; farming equipment such as tractors, plows, or pesticide sprayers; hauling equipment such as truck trailers, utility bodies or camper shells; and miscellaneous equipment such as street cleaners or golf carts.

(3) “Beneficial use or reuse” has the meaning given in s. NR 500.03.

(4) “Core” means in foundry operations a separable part of a mold which is usually made of sand and is used to create openings and various cavities in the castings.

(5) “Core binder” means any substance used to bind sand together to form a core.

(6) “Core or mold coating” means a substance used to alter the surface of a core or mold through coating or cleaning after the core or mold has been manufactured.

(6g) “Fixed cover” means any impermeable cover for industrial wastewater collection and treatment operations installed in a permanent stationary position.

(6r) “Floating cover” means any impermeable cover for industrial wastewater collection and treatment operations that is in contact with a liquid surface at all times.

(7) “Floating roof” means a storage tank cover consisting of a double deck or pontoon single deck, which rests upon and is supported by the petroleum liquid being contained, and is equipped with a closure seal or seals to seal the space between the roof edge and tank wall. The floating roof may be either a covered external floating roof in an open storage tank or an internal floating cover beneath a fixed roof.

(8) “Hydrocarbon” means any organic compound containing carbon and hydrogen.

(8m) “Junction box” means any structure where sewer lines meet with one or more waste streams co-mingled.

(9) “Landfill” has the meaning given in s. NR 500.03.

(10) “Landspreading facility” has the meaning given in s. NR 500.03.

(10m) “Manhole” means any service entrance into sewer lines that allows access.

(11) “Maximum theoretical emissions” means the quantity of VOC emissions that theoretically could be emitted by a stationary source without consideration of control devices based on the design capacity or maximum production capacity of the source and 8,760 hours of operation per year. In determining the maximum theoretical emissions for a source, the design capacity or maximum production capacity shall include the use of necessary coatings and inks with the highest VOC content used in practice by the source. When appropriate, and upon request by the source owner or operator, maximum theoretical emissions may be limited by the imposition of conditions in a federally enforceable permit. Such conditions shall be used in place of design capacity or maximum production capacity in calculating the maximum theoretical emissions for the source and may include, among other things, the establishment of production limitations, capacity limitations, or limitations on the VOC content of coatings or inks, or the hours of operation of any emission source, or a combination of any such limitations. Production or capacity limitations shall be established on the basis of no longer than one month and may allow for averaging for up to 12 consecutive months.

(12) “Mold” means the matrix in which metal is cast and receives its form.

(13) “Petroleum liquid” means crude petroleum, petroleum, condensate and any finished or intermediate products manufactured or extracted in a petroleum refinery or in a facility which produces oils from tar sands, shale, coal or coke.

(14) “Photochemically reactive organic compounds” means any of the following:

(a) Group A: Hydrocarbons, alcohols, aldehydes, esters, ethers or ketones, which have olefinic or cyclo-olefinic type unsaturation.

(b) Group B: Aromatic compounds with 8 or more carbon atoms to the molecule, except ethylbenzene.

(c) Group C: Ethylbenzene, toluene or ketones having branched hydrocarbon structures.

(d) Group D: A solvent or mixture of organic compounds in which any of the following conditions are met:

1. More than 20% of the total volume is composed of any combination of compounds listed in group A, B or C above.

2. More than 5% of the total volume is composed of any combination of the compounds listed in group A above.

3. More than 8% of the total volume is composed of any combination of the compounds listed in group B above.

(14g) “Process drain” means any opening, including a covered or controlled opening, that is installed or used to receive or convey wastewater into the wastewater system.

(14r) “Sewer line” means a lateral trunk line, branch line, ditch or other conduit used to convey wastewater.

(15) “Submerged fill pipe” means any fill pipe with a discharge opening which is entirely submerged when the liquid level is 15.2 centimeters (6 inches) above the tank bottom.

(15m) “Sump” means a surface impoundment or excavated depression in the ground, which is part of the wastewater system and is used for storage of wastewater or separation of petroleum liquids, VOC containing liquids, water or solids.

(16) “Urethane cold box binder” means a core binder which uses components such as phenol formaldehyde resins and isocyanates to form a bond after catalysis by an organic gas such as triethylamine or dimethylethylamine.

(17) “Vent” means any port or opening which allows gases to be discharged to the atmosphere when leaving a reactor or other equipment.

(18) “Virgin petroleum liquid” means petroleum liquid which has not been contaminated by compounds not initially present through use or mixture with other liquids. Virgin petroleum liquids include gasoline, diesel fuel, kerosene, distillate fuel oils, residual fuel oils and other products produced through distillation of petroleum or through redistillation, cracking, extraction or reforming of unfinished petroleum derivatives.

(19) “Wastewater” means a water stream or other liquid waste stream, which may contain petroleum liquid, emulsified oil, VOC or other hydrocarbons.

(20) “Wastewater separator” means any device, used to separate petroleum liquids or VOC containing liquids from the water or liquid waste stream including devices such as separator forebays, clarifiers and tanks including dissolved air flotation tanks, induced gas flotation tanks and induced air flotation tanks.

(21) “Wastewater system” means any system used to receive, convey, separate, treat or process wastewater that consists of one or more process drains, sewer lines, junction boxes, manholes, sumps or wastewater separators, including all of their associated components.

(22) “Water seal” means any seal pot, p-leg trap or other type of trap filled with a liquid not containing organic compounds in order to create a barrier between the sewer and the atmosphere.

History: Renum from NR 154 01, cr (intro) and (7), Register, September, 1986, No 369, eff 10-1-86; renum (1) and (2) to be (1m) and NR 400 02 (72), Register, February, 1990, No 410, eff 3-1-90; cr (1s), (1t), (1u), (3m) and (6m), Register, June, 1994, No 462, eff 7-1-94; cr (8), Register, September, 1994, No 465, eff 10-1-94; cr (1p), (3c) and (3e), Register, August, 1995, No 476, eff 9-1-95; am (intro), renum (1m), (1p), (1s), (1t), (1u), (2), (3), (3c) and (3e) to be (2) to (10), renum (3m), (4), (6), (6m) and (7) to be (12) and (14) to (17), renum (8) to be (18) and am , cr (11), renum (13) from 420 02 (28), Register, December, 1995, No 480, eff 1-1-96; am (14) (intro), Register, October, 1999, No 526, eff 11-1-99; am (2), Register, January, 2001, No 541, eff 2-1-01; CR 08-104; cr. (6g), (6r), (8m), (10m), (14g), (14r), (15m), (19), (20), (21), (22) Register July 2009 No. 643, eff. 8-1-09.

NR 419.03—General limitations. **(1)** No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution.

(2) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. Such precautions shall include, but are not limited to:

(a) Use of caution to prevent spillage or leakage when filling tanks, trucks or trailers.

(b) Use of caution when filling automobile tanks to prevent spillage.

History: Renum from NR 154 13 (1) (a) and (b), Register, September, 1986, No 369, eff 10-1-86; am (1) and (2) (intro), Register, February, 1990, No 410, eff 3-1-90.

NR 419.04—Disposal of VOC wastes. **(1)** Effective August 1, 1979, no person may cause, allow or permit the disposal of more than 5.7 liters (1.5 gallons) of any liquid VOC waste, or of any liquid, semisolid or solid waste materials containing more than 5.7 liters (1.5 gallons) of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season, except as provided for in s. NR 419.07. This includes, but is not limited to, the disposal of VOC which must be removed from VOC control devices so as to maintain the control devices at their required operating efficiency.

(2) Disposal during the ozone season shall be by methods approved by the department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 5.7 liters (1.5 gallons) in any one day, whichever is larger.

History: Renum from NR 154 13 (1) (c), Register, September, 1986, No 369, eff 10-1-86; am (1), Register, February, 1990, No 410, eff 3-1-90; am (1), Register, August, 1995, No 476, eff 9-1-95.

NR 419.045—Industrial wastewater collection and treatment operations. **(1)** **APPLICABILITY AND EXEMPTIONS.**

(a) *Applicability.* this section applies to any industrial wastewater collection and treatment (IWCT) facility that has maximum theoretical emissions of VOCs greater than or equal to 100 tons per year and that is located in the county of Milwaukee, Waukesha, Washington, Ozaukee, Racine, Kenosha or Sheboygan, and whose facility operations are specifically listed under any of the following codes in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05 (17):

1. All codes in the 4-digit industry group 3221, pulp, paper and paperboard mills:

2. Codes 32511, 32512, 32513, 32518, 32519, 32521, 32522 and 32532 from the 4-digit industry group 3251, basic chemical manufacturing:

3. Codes 325411, 325412 and 325414 from the 4-digit industry group 3254, pharmaceutical and medicine manufacturing:

4. Codes 562211, 562212, 562213 and 562219 from the 4-digit industry group 5622, waste treatment and disposal:

5. Code 56292 from the 4-digit industry group 5629, remediation and other waste management services.

(b) *Exemptions.* This section does not apply to IWCT operations that meet either of the following:

1. Discharge to a municipal wastewater treatment plant and is subject to the provisions of ch. NR 211.

2. Equipment, including catch basins that exclusively receive, hold, or discharge rainwater, storm water runoff or water that has not been in contact with any wastewater.

(2) EMISSION CONTROL REQUIREMENTS. The owner or operator of a facility subject to this section shall ensure that all of the following are met:

(a) *Sumps and wastewater separators.* Sumps and wastewater separators shall include one of the following:

1. A floating cover equipped with seals.

2. A fixed cover, equipped with a closed vent system vented to a control device that shall achieve either of the following:

a. A destruction efficiency of 95% by weight or greater of VOC as determined by Method 25A in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (20), at the outlet of the control device. Each emissions test shall be performed annually to determine control efficiency and follow the methods and procedures listed in s. NR 439.07.

b. The VOC emission concentration from the outlet of the control device shall be less than 500 ppm, as determined by Method 18, 25 or 25A in 40 CFR part 60, Appendix A, incorpo-