

## Chapter NR 419

## CONTROL OF ORGANIC COMPOUND EMISSIONS

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**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. 144.31 and 144.38, 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 in this section apply to the terms used in chs. NR 419 to 425. In addition, the definitions in ch. NR 400 apply to the terms used in this chapter.

(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.

(1m) "Automobile" means all passenger cars or passenger car derivatives capable of seating 12 or fewer passengers.

(2) "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.

(3) "Hydrocarbon" means any organic compound containing carbon and hydrogen.

(4) "Photochemically reactive organic substances" 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.

(6) "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.

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

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.

**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. 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.

**NR 419.05 Storage of any organic compound.** (1) **APPLICABILITY.** (a) This section applies to all storage tanks for organic compounds having capacities greater than 151,412 liters (40,000 gallons) in the Southeastern Wisconsin Intrastate AQCR, and to all such storage tanks throughout the state on which construction or modification commenced after April 1, 1972, with the following exceptions:

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1. Tanks storing organic compounds that are not photochemically reactive on which construction or modification commenced before August 1, 1979.

2. Tanks used exclusively for storing organic compounds exempted under s. NR 425.04 (1) (a).

(b) Where a provision of s. NR 420.03 also applies, the more stringent requirement shall be met.

(2) STORAGE REQUIREMENTS. When storing organic compounds, solvents or mixtures having a vapor pressure greater than 10.5 kPa (1.52 psia) at 21°C (70°F), floating roofs, vapor condensation systems, vapor holding tanks, or equally effective alternative control methods approved by the department shall be used.

History: Renum. from NR 154.13 (2) (c) and am. Register, September, 1986, No. 369, eff. 10-1-86; am. (1) (a) 2., Register, February, 1990, No. 410, eff. 3-1-90.

**NR 419.06 Transfer of any organic compound.** (1) **APPLICABILITY.** (a) This section applies to transfer operations in the Southeastern Wisconsin Intrastate AQCR involving organic compounds, solvents or mixtures having a vapor pressure greater than 10.5 kPa (1.52 psia) at 21°C (70°F), and to such transfer operations throughout the state at facilities on which construction or modification was commenced after April 1, 1972, with the following exceptions:

1. Transfer operations involving organic compounds which are not photochemically reactive at facilities on which construction or modification was commenced before August 1, 1979.

2. Transfer operations involving, exclusively, organic compounds exempted under s. NR 425.04 (1) (a).

(b) Where a provision elsewhere in ss. NR 420.04 and 421.03 (2) also applies, the more stringent requirement shall be met.

(2) TANK LOADING. For transfers to storage tanks having greater than 3,785 liter (1,000 gallon) capacity, a permanent submerged fill pipe shall be used, provided such a tank does not have controls mentioned in s. NR 421.03 (3) (b).

(3) TANK LOAD OUT FOR HIGH THROUGHPUT FACILITIES. At facilities with over 151,412 liters (40,000 gallons) per day throughput, a vapor collection and disposal system, vapor collection adaptors and vapor-tight seal, or an underfill method with the top hatches partially closed or a means of creating a slight back pressure when loading tank trucks or trailers shall be used.

(4) TANK LOAD OUT FOR LOW THROUGHPUT FACILITIES. At facilities with 151,412 liters (40,000 gallons) or less per day throughput, the underfill method or a submerged fill pipe extending to within 6 inches of the tank bottom shall be employed when loading tank trucks or trailers.

History: Renum. from NR 154.13 (3) (f) and am. Register, September, 1986, No. 369, eff. 10-1-86; am. (1) (a) 2., Register, February, 1990, No. 410, eff. 3-1-90.