

**CR 08-104**

ORDER OF THE STATE OF WISCONSIN  
NATURAL RESOURCES BOARD  
AMENDING AND CREATING RULES

The Wisconsin Natural Resources Board adopts an order to **amend** NR 484.04(16), (19) and (20) and to **create** NR 419.02 (6g), (6r), (8m), (10m), (14g), (14r), (15m), (19), (20), (21) and (22) and 419.045 relating to VOC emission controls for industrial wastewater collection and treatment operations.

**AM-24-08**

Summary Prepared by the Department of Natural Resources

1. **Statute interpreted:** Sections 227.11(2)(a), 285.11(1) and (6), Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.
2. **Statutory authority:** Sections 227.11(2)(a) and 285.11(1) and (6), Stats.
3. **Explanation of agency authority:** Section 227.11(2)(a), Stats., gives state agencies general rulemaking authority. Section 285.11(1), Stats., gives the Department authority to promulgate rules consistent with ch. 285, Stats. Section 285.11 (6), Stats., requires DNR to develop a plan for the prevention, abatement and control of air pollution. With limited exceptions, the rules or control strategies for ozone control must conform to section 182(b)(2) of the federal Clean Air Act [42 USC 7511a (b)(2)].
4. **Related statute or rule:** There are no related statutes that are not identified above.
5. **Plain language analysis:** Section 182(b)(2) of Clean Air Act requires implementation of reasonably available control technology (RACT) for sources of volatile organic compounds (VOC) emissions in moderate and worse ozone nonattainment areas, for which EPA has published a Control Techniques Guideline (CTG). The DNR has promulgated rules for VOC RACT emission limits in Wisconsin's moderate ozone nonattainment areas.

However, on March 17, 2008, EPA notified DNR that Wisconsin's state implementation plan was deficient because DNR rules did not establish VOC RACT emission limits consistent with recently published CTGs in Wisconsin's ozone nonattainment areas. One of the identified VOC CTG emission source categories for which the DNR has yet to establish RACT limits is industrial wastewater collection and treatment (IWCT) operations. The rule is necessary to avoid potential federal sanctions.

**6. Summary of, and comparison with, existing or proposed federal regulation:**

The rule will modify the DNR's ozone state implementation plan to meet the requirements of the federal Clean Air Act and to clarify other state requirements.

**7. Comparison with similar rules in adjacent states:** The proposed rule is based on requirements established in the federal Clean Air Act. Any of the adjacent states which have ozone nonattainment areas

are also charged with meeting these same requirements. Minnesota and Iowa do not have ozone nonattainment areas and therefore are not required to develop VOC RACT rules.

The US EPA approved Illinois's non-declaration rulings that there are no industrial wastewater control and treatment (IWCT) operations in both the Chicago ozone nonattainment area (Federal Register, Apr. 27, 2001 [Vol 66, Number 82, Pages 21096-21099]) and the Illinois metro-east ozone nonattainment area near St. Louis, MO (Federal Register, Jan. 6, 1999 [Vol 64, Number 3, Pages 756-759]). Michigan currently has no rules that regulate VOC emissions from IWCT operations.

**8. Summary of factual data and analytical methodologies used and how any related findings support the regulatory approach chosen:** In a March 17, 2008 letter to the DNR, the US EPA outlined why Wisconsin's state implementation plan (SIP) for ozone was being declared deficient with respect to meeting requirements of the Federal Clean Air Act. These reasons included a failure to promulgate an administrative rule to require that VOC emissions from industrial wastewater collection and treatment operations be subject to reasonably available control technology (RACT) in Wisconsin's ozone nonattainment areas. In the same March 17 letter the US EPA notified the DNR that Wisconsin might be subject to federal sanctions if these deficiencies are not fully remedied by September 2009.

**9. Analysis and supporting documents used to determine effect on small business or in preparation of economic impact report:** Due to the 100 ton/year applicability threshold in the rule, it is highly unlikely that a small business, as defined under 227.114(1), Stats., would have an IWCT operation that triggers the emission reduction requirements in the rule.

**10. Effect on small business:** This rule will have no effect on small businesses.

**11. Agency contact person:** Bill Adamski, Wisconsin DNR, P.O. Box 7921, Madison, WI 53707, (608) 266-2660, [william.adamski@wisconsin.gov](mailto:william.adamski@wisconsin.gov)

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SECTION 1. NR 419.02 (6g), (6r), (8m), (10m), (14g), (14r), (15m), (19), (20), (21) and (22) are created to read:

NR 419.02(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.

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

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

(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.

(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.

(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.

SECTION 2. NR 419.045 is created to read:

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, incorporated by reference in s. NR 484.04(16), (19) and (20). The frequency of monitoring shall be at least monthly. Each emission test shall follow the methods and procedures listed in s. NR 439.07.

(b) *Sumps and wastewater separator covers.* Sump and wastewater separator covers, both fixed and floating, shall meet all of the following requirements:

1. The cover material shall be impermeable to VOCs and free from holes, tears and openings.
2. Drains on covers shall be equipped with a slotted membrane fabric cover, or an equivalent cover material, over at least 90% of the open area.
3. Gauging or sampling openings on the separator shall be covered. The covers shall be kept closed, with no visible gaps between cover and separator, except when the sampling device is actively being used.
4. Hatches on covers shall be kept closed and free of gaps, except when opened for active inspection, maintenance, sampling or repair.

(c) *Sewer lines.* All sewer lines shall be completely enclosed so that no liquid surface is exposed to the atmosphere. The manhole cover shall remain fully closed, except when opened for active inspection, maintenance, sampling or repair.

(d) *Process drains.* Each process drain shall be equipped with a water seal.

(e) *Junction boxes.* Each junction box shall be totally enclosed with a solid, gasketed fixed cover

or a manhole cover. If a fixed cover is used, it may have an open vent pipe that is no more than 4 inches in diameter and that is at least 3 feet in length. If a manhole cover is used, the cover's total openings may not exceed 12 square inches and the manhole cover shall remain fully closed, except when opened for active inspection, maintenance, sampling or repair.

(3) COMPLIANCE SCHEDULE. The owner or operator of any facility subject to this section shall do both of the following:

(a) Notify the department's bureau of air management in writing by 60 days after the effective date of this section ... [LRB insert date] that the facility is subject to the requirements of this section. The notification shall provide the name and location of the affected facility.

(b) Achieve final compliance with the requirements of this section no later than 18 months after the effective date of this section ... [LRB insert date].

(4) RECORDKEEPING. The owner or operator of a facility subject to this section shall do both of the following:

(a) Record in a daily log both of the following:

1. Operation time for all control devices and monitoring equipment.
2. Details of all routine and non-routine maintenance performed on all control devices and monitoring equipment including dates and duration of any outages.

(b) Maintain detailed records of all air emission tests performed.

SECTION 3. NR 484.04(16), (19) and (20) in Table 2 are amended to read:

NR 484.04

<b>CFR Appendix Referenced</b>	<b>Title</b>	<b>Incorporated by Reference For</b>
(16) 40 CFR part 60 Appendix A, Method 18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography	NR 400.02(77) NR 422.142(5)2 <u>NR 419.045 (2) (a)2.</u>

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|------|---------------------------------------|--|---|
| (19) | 40 CFR part 60 Appendix A, Method 25  | Determination of Total Gaseous Nonmethane Organic Emissions as Carbon                  | NR 422.142(5)(a)<br><u>NR 419.045 (2) (a)2.</u> |
| (20) | 40 CFR part 60 Appendix A, Method 25A | Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer | NR 422.142(5)(a)<br><u>NR 419.045 (2) (a)2.</u> |

SECTION 4. EFFECTIVE DATE. This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22 (2) (intro.), Stats.

SECTION 5. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on March 25, 2009.

Dated at Madison, Wisconsin May 18, 2009.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By /S/ Matthew J Frank  
Matthew J. Frank, Secretary

(SEAL)