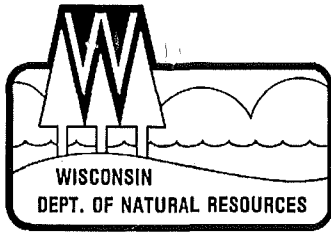


CR 94-10



George E. Meyer
Secretary

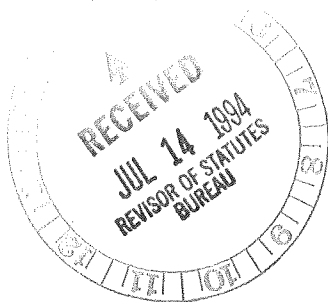
State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

101 South Webster Street
Box 7921
Madison, Wisconsin 53707
TELEPHONE 608-266-2621
TELEFAX 608-267-3579
TDD 608-267-6897

STATE OF WISCONSIN)
)
DEPARTMENT OF NATURAL RESOURCES) SS

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, George E. Meyer, Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. AM-29-93 was duly approved and adopted by this Department on May 26, 1994. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.



IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Natural Resources Building in the City of Madison, this 7th day of July, 1994.

George E. Meyer
George E. Meyer, Secretary

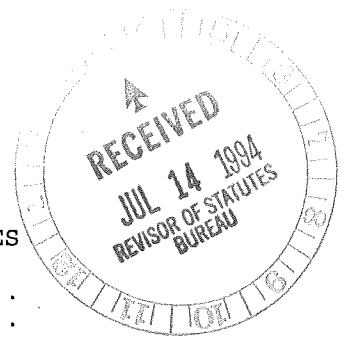
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9-1-94



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



.....
IN THE MATTER of renumbering and amending s. NR 484.05(2);
amending s. NR 422.02(7) and (34), 422.03(intro.), 422.04(1)(a)
and 439.04(5)(a)(intro.); and creating s. NR 422.02(12e),
(18m), (24s), (27m), (33d), (34m), (46m) and (51), 422.03(8)
and (9), 422.132 and 422.135, of the Wisconsin Administrative
Code, pertaining to volatile organic compound emissions from
molded wood parts and products and wood door coating.
.....

AM-29-93

Analysis Prepared by the Department of Natural Resources

Statutory authority: ss. 144.31(1)(a), 144.38 and 227.11(2)(a), Stats.

Statutes interpreted: s. 144.31(1)(f), Stats., and revise the State Implementation Plan (SIP) developed under that provision.

Wisconsin's Reasonably Available Control Technology (RACT) rules for volatile organic compounds (VOCs) are intended to achieve and maintain compliance with the national ambient air quality standard for ozone. These proposed rule changes are intended to fulfill requirements under the Clean Air Act Amendments of 1990 related to RACT for VOCs. RACT consists of equipment and/or processes that provide the lowest emission rate when considering economic and technological feasibility. The proposed rules establish RACT for major sources located in moderate or worse ozone nonattainment areas which coat molded wood parts and products or wood doors. Minor changes are also made to update a definition relating to flat wood panel coating.

SECTION 1. NR 422.02(7) is amended to read:

NR 422.02(7) "Class II hardboard paneling finish" means ~~finishes which meet a finish that meets~~ the specifications of ~~Voluntary Product Standard PS-59-73~~ ANSI/AHA A135.5-1988 as approved by the American National Standards Institute. This standard is incorporated by reference in ch. NR 484.

SECTION 2. NR 422.02(12e), (18m), (24s), (27m) and (33d) are created to read:

NR 422.02(12e) "Electrostatic application" means a coating method in which an electrical charge is applied to the object coated and the airborne particles of coating are attracted to the object due to the electrostatic potential created.

(18m) "Flow coating" means a coating method in which an object is coated by causing a stream of coating to flow over the object and draining off any excess coating.

(24s) "Low-pressure spray method" means any coating method in which an object is coated with an air-atomizing spray gun that operates at no more than 69 kPa (10.0 psig) air pressure.

(27m) "Molded wood parts or products" means any composite shape molded, through heat, pressure and time, from a mixture of less than 30% by weight organic thermoset resin, and at least 10% by weight wood filler.

(33d) "Pigmented coating" means an opaque coating which contains binders and colored pigments and which is formulated to hide a surface, either as an undercoat or topcoat.

SECTION 3. NR 422.02(34) is amended to read:

NR 422.02(34) "Prime coat" means a coating applied directly to a substrate or on top of a pretreatment coat or other coating for purposes of filling pores in the substrate, providing corrosion resistance or enhancing adhesion or blister resistance of subsequent coatings.

SECTION 4. NR 422.02(34m), (46m) and (51) are created to read:

NR 422.02(34m) "Prime pigments" means pigments or solids which contribute to the overall coating color. Pigments whose main function is to act as a filler or provide corrosion resistance rather than providing color are not prime pigments.

(46m) "Tinted pigmented coating" means a pigmented coating which contains less than 99.5% by weight white prime pigment as a percentage of all prime pigments.

(51) "White pigmented coating" means a pigmented coating which contains 99.5% or more by weight white prime pigment as a percentage of all prime pigments.

SECTION 5. NR 422.03(intro.) is amended to read:

NR 422.03 EXEMPTIONS.(intro.) Sections NR 422.04 to 422.155 apply to any facility which contains one or more of the surface coating or printing

process lines described in ss. NR 422.05 to 422.155, except as specified in this section. If VOC emissions exceed an exemption level given in this section, the exemption will no longer apply to the source. Exempt facilities are subject to the recordkeeping requirements of s. NR 439.04(4). Exempt facilities include:

SECTION 6. NR 422.03(8) and (9) are created to read:

NR 422.03(8) Any molded wood parts and products coating facility that is any of the following:

(a) Located outside the counties of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha.

(b) Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha and which has maximum theoretical emissions of VOCs from all molded wood parts and products coating at the facility of less than 25 tons per year.

(c) Located in the county of Kewaunee, Manitowoc or Sheboygan and which has maximum theoretical emissions of VOCs from all molded wood parts and products coating at the facility of less than 100 tons per year.

(9) Any wood entry or passage door coating facility that is any of the following:

(a) Located outside the counties of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha.

(b) Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha and which has maximum theoretical emissions of VOCs from all wood entry or passage door coating at the facility of less than 25 tons per year.

(c) Located in the county of Kewaunee, Manitowoc or Sheboygan and which has maximum theoretical emissions of VOCs from all wood entry or passage door coating at the facility of less than 100 tons per year.

SECTION 7. NR 422.04(1)(a) is amended to read:

NR 422.04(1)(a) No owner or operator of a coating line subject to an emission limitation contained in ss. NR 422.05 to 422.08, 422.09 to 422.12, 422.132, 422.135, 422.15 or 422.155 and complying with the emission limitation by means of this subsection may cause, allow or permit the daily volume weighted average VOC content to exceed the emission limitation to which the coatings are subject. For purposes of this paragraph, daily volume weighted average VOC content shall be calculated by using the following equation:

$$\text{VOC}_A = \left[\sum_{i=1}^n C_i V_i \right] / V_T$$

where:

VOC_A is the volume-weighted average VOC content of 2 or more coatings applied on a coating line during any day in kilograms per liter (pounds per gallon) of coating, excluding water

i is the subscript denoting an individual coating

n is the number of different coatings subject to the same numerical emission limitation applied during any day on a coating line

C_i is the VOC content of each coating (i) as applied during any day on the coating line in kilograms per liter (pounds per gallon) of coating, excluding water

V_i is the volume of each coating (i), excluding water, as applied during any day on the coating line in liters (gallons)

V_T is the total volume of all coatings (n) subject to the same emission limitation, excluding water, applied during any day on the coating line in liters (gallons)

SECTION 8. NR 422.132 is created to read:

NR 422.132 WOOD DOOR COATING. (1) APPLICABILITY. Except as provided in pars. (a) to (c), this section applies to wood entry or passage door coating lines of any wood entry or passage door coating facility. This section does not apply to any of the following:

- (a) A facility which is exempt under s. NR 422.03(9).
- (b) Flat wood panel coating lines subject to s. NR 422.13.
- (c) Adhesive coatings at the facility.

(2) EMISSION LIMITATIONS AND APPLICATION REQUIREMENTS. (a) No owner or operator of an automated wood entry or passage door coating line may cause, allow or permit the emission of any VOCs in excess of:

1. 0.77 kilograms per liter (6.9 pounds per gallon) of coating, excluding water, delivered to an applicator that applies any coating on or after May 31, 1995, but before May 1, 1997.

2. 0.64 kilograms per liter (5.7 pounds per gallon) of coating, excluding water, delivered to an applicator that applies any coating, on or after May 1, 1997.

(b) An owner or operator of a wood entry or passage door coating facility shall only apply coatings using electrostatic application, flow coating, dip coating, low-pressure spray method, paint brush, hand roller or roll coater. All application equipment shall be in proper operating condition and used in accordance with proper operating procedures.

(3) RECORDKEEPING REQUIREMENTS. Any facility subject to this section shall comply with the requirements applicable under s. NR 439.04(5).

SECTION 9. NR 422.135 is created to read:

NR 422.135 MOLDED WOOD PARTS OR PRODUCTS. (1) APPLICABILITY. Except as provided in pars. (a) and (b), this section applies to molded wood parts or products coating lines of any molded wood parts or products coating facility. This section does not apply to either of the following:

- (a) A facility which is exempt under s. NR 422.03(8).

(b) The use of topcoats which are applied as a stripe not more than 1/2 inch in width to croquet balls and whose use in aggregate never exceeds 500 gallons per year, as applied.

(2) EMISSION LIMITATIONS. (a) No owner or operator of a molded wood parts or products coating facility which uses flow coating to apply topcoats may cause, allow or permit the emission of any VOCs in excess of the limitations specified in Table 1.

Table 1 -- Emission Limitations For Facilities Using
Flow Coating To Apply Topcoats
[Kilograms per liter (pounds per gallon) of coating,
excluding water, delivered to a coating applicator]

COATING	Between May 30, 1995 and May 1, 1997	On and After May 1, 1997
White pigmented prime coating	0.30 (2.5)	0.30 (2.5)
Tinted pigmented prime coating	0.33 (2.75)	0.33 (2.75)
Topcoat	0.64 (5.3)	0.42 (3.5)

(b) No owner or operator of a molded wood parts or products coating facility which applies a topcoat using any application method other than flow coating may cause, allow or permit the emission of any VOCs in excess of the limitations specified in Table 2.

Table 2 -- Emission Limitations For Facilities Using
Application Methods Other Than Flow Coating To Apply Topcoats
[Kilograms per liter (pounds per gallon) of coating,
excluding water, delivered to a coating applicator]

COATING	Between May 30, 1995 and November 15, 1996	On and After November 15, 1996
Prime coat	0.71 (5.9)	0.30 (2.5)
Topcoat	0.42 (3.5)	0.42 (3.5)

(3) RECORDKEEPING REQUIREMENTS. Any facility subject to this section shall comply with the requirements applicable under s. NR 439.04(5).

SECTION 10. NR 439.04(5)(a)(intro.) as affected by CR 93-38 (AM-3-93) is amended to read:

NR 439.04(5)(a)(intro.) Any owner or operator of a coating or printing line or operation subject to an emission limitation in ss. NR 422.05 to 422.08, 422.09 to 422.12, 422.132, 422.135 or 422.145 to 422.155 shall collect and record the following information for each coating or printing line or operation:

SECTION 11. NR 484.05(2) is renumbered 484.05(9) and amended to read:

NR 484.05(9) ~~National Bureau of Standards, Voluntary Product Standard PS 59-73,~~ ANSI/AHA A135.5-1988, Prefinished Hardwood Hardboard Paneling, for s. NR 422.02(7). Copies of this document may be obtained from the ~~National Institute of Standards and Technology, Quince Orchard and Clopper Roads, Gaithersburg, MD 20899~~ American Hardboard Association, 1210 W Northwest Highway, Palatine IL 60067.

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on May 26, 1994.

The 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.

Dated at Madison, Wisconsin 7/7/94.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By

George E. Meyer
George E. Meyer, Secretary

(SEAL)

