

## WISCONSIN LEGISLATIVE COUNCIL STAFF

**RULES CLEARINGHOUSE**

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**CLEARINGHOUSE REPORT TO AGENCY**

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[THIS REPORT HAS BEEN PREPARED PURSUANT TO S. 227.15, STATS. THIS IS A REPORT ON A RULE AS ORIGINALLY PROPOSED BY THE AGENCY; THE REPORT MAY NOT REFLECT THE FINAL CONTENT OF THE RULE IN FINAL DRAFT FORM AS IT WILL BE SUBMITTED TO THE LEGISLATURE. THIS REPORT CONSTITUTES A REVIEW OF, BUT NOT APPROVAL OR DISAPPROVAL OF, THE SUBSTANTIVE CONTENT AND TECHNICAL ACCURACY OF THE RULE.]

**CLEARINGHOUSE RULE 00-174**

AN ORDER to amend NR 422.02 (8) and (89), 422.04 (1) (a) and 439.04 (5) (a); and to create NR 422.02 (7v), (7y), (12m), (21m), (22m), (53d), (53h), (53t), (64m), (75g), (75r), (85m), (87s), (90m), (95m) and (106m) and 422.083, relating to reducing ambient ozone concentrations in southeastern Wisconsin by controlling volatile organic compound (VOC) emissions.

Submitted by **DEPARTMENT OF NATURAL RESOURCES**

12-08-00 RECEIVED BY LEGISLATIVE COUNCIL.  
01-09-01 REPORT SENT TO AGENCY.

RNS:JES;jal;tlu

**LEGISLATIVE COUNCIL RULES CLEARINGHOUSE REPORT**

This rule has been reviewed by the Rules Clearinghouse. Based on that review, comments are reported as noted below:

1. STATUTORY AUTHORITY [s. 227.15 (2) (a)]

Comment Attached      YES       NO

2. FORM, STYLE AND PLACEMENT IN ADMINISTRATIVE CODE [s. 227.15 (2) (c)]

Comment Attached      YES       NO

3. CONFLICT WITH OR DUPLICATION OF EXISTING RULES [s. 227.15 (2) (d)]

Comment Attached      YES       NO

4. ADEQUACY OF REFERENCES TO RELATED STATUTES, RULES AND FORMS  
[s. 227.15 (2) (e)]

Comment Attached      YES       NO

5. CLARITY, GRAMMAR, PUNCTUATION AND USE OF PLAIN LANGUAGE [s. 227.15 (2) (f)]

Comment Attached      YES       NO

6. POTENTIAL CONFLICTS WITH, AND COMPARABILITY TO, RELATED FEDERAL  
REGULATIONS [s. 227.15 (2) (g)]

Comment Attached      YES       NO

7. COMPLIANCE WITH PERMIT ACTION DEADLINE REQUIREMENTS [s. 227.15 (2) (h)]

Comment Attached      YES       NO

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## CLEARINGHOUSE RULE 00-174

### Comments

**[NOTE: All citations to "Manual" in the comments below are to the Administrative Rules Procedures Manual, prepared by the Revisor of Statutes Bureau and the Legislative Council Staff, dated September 1998.]**

#### 2. Form, Style and Placement in Administrative Code

a. The text of the rule should be arranged in the numerical order of the decimal-numbered provisions affected by the rule. [See s. 1.04, Manual.] This drafting style was not followed in SECS. 1 and 2. For example, the creation of s. NR 422.02 (7v) should precede the amendment of s. NR 422.02 (8), and the amendment of s. NR 422.02 (89) should follow the creation of s. NR 422.02 (85m).

b. The department should delete the phrase "under s. NR 422.083" in the first sentence in the definition in s. NR 422.02 (89) (b) to make this definition consistent with other definitions in s. NR 422.02 that apply to single sections in ch. NR 422. Alternatively, the department should move section-specific definitions in s. NR 422.02 to the section that uses the defined term.

c. The preferred drafting style is to avoid the use of slashed alternatives. [See s. 1.01 (9) (a), Manual.] This style was not followed in a number of provisions in the rule, including ss. NR 422.02 (7v), (21m) and 422.083 (1) (c) 2. and in item (a) 3. c. in Table A following s. NR 422.083 (2) (b).

d. In defining different types of coatings in s. NR 422.02, the rule should use consistent terminology, unless there is a substantive reason not to, and express all terms being defined in the singular. For example, s. NR 422.02 (7y) defines "baked coatings," s. NR 422.02 (22m) defines an "electrostatic prep coat" and s. NR 422.02 (53d) defines a "mask coating."

e. In s. NR 422.02 (12m) and (53h), “the following:” should be deleted.

f. The second sentence in the definition of “electrostatic prep coat” in s. NR 422.02 (22m) contains nondefinitional material, which should be excluded from the definition. The sentence could be placed in a note. In addition, it is not clear why this definition has a reference to a material safety data sheet and definitions of other types of coatings do not.

g. The preferred drafting style is to not use parentheses in the text of the rule. [See s. 1.01 (6), Manual.] This style was not followed in a number of provisions of the rule, including s. NR 422.02 (21m), (53h) and items (a) 2. a. and b. in Table A following s. NR 422.083 (2) (b).

h. Since the existing tables in ch. NR 422 are labeled with Arabic numbers, Table A, as created by the rule, should also be labeled by a number rather than a letter. See, for example, Table 1 referenced in s. NR 422.095 (4).

#### **4. Adequacy of References to Related Statutes, Rules and Forms**

The reference to Legislative Council Clearinghouse Rule 00-101 in the treatment clause in SEC. 1 is adequate and appropriate provided that the department ensures that it promulgates Clearinghouse Rule 00-101 prior to promulgating the present rule, Clearinghouse Rule 00-174.

#### **5. Clarity, Grammar, Punctuation and Use of Plain Language**

a. The rule contains a number of provisions in which the phrase “but are not limited to” follows the verb “include” or the phrase “but not limited to” follows the participle “including.” In these instances, the “but are not limited to” and the “but not limited to” phrases are redundant and unnecessary. See, for example, s. NR 422.02 (12m), (53h), (53t) and (89) (b).

b. The department should review the definition of “baked coatings” in s. NR 422.02 (7y). If the department intends that a “baked coating” is a coating that is not an air-dried coating, then the department should revise this definition accordingly. If this is not the department’s intent, then the department should revise the definition of baked coating to clearly convey its intended meaning.

c. The definition of “mask coating,” in s. NR 422.02 (53d) is grammatically incorrect. Should “a” precede “part”?

d. The specific definition of the common word “miscellaneous” in s. NR 422.02 (53h) is counterintuitive, diminishes the clarity of the rule and is a drafting practice that should be avoided. The department should use an expanded term, such as “miscellaneous plastic part.” Alternatively, the department should review whether a definition of “miscellaneous” is even needed if the only use of this term is the heading to item (c) in Table A following s. NR 422.083 (2) (b).

e. The phrase “rich leather-like appearance” in s. NR 422.02 (87s) is subjective and thus vague. Can the department be more specific?

f. Should "operator" be placed before "subject" in s. NR 422.083 (3) (b)?

g. The department should specify the criteria under which it will approve another time period for recordkeeping under s. NR 422.083 (3) (c) to ensure consistent application of this provision.

**6. Potential Conflicts With, and Comparability to, Related Federal Regulations**

The analysis accompanying the rule indicates that the rule is required under the federal Clean Air Act to help attain the one-hour ambient air quality standard for ozone in southeastern Wisconsin. Thus, the requirements in s. 285.11 (6), Stats., apply to this rule. Since the analysis does not indicate that the Governor has made either of the determinations in s. 285.11 (6) (a) or (b), Stats., it appears that the requirement in s. 285.11 (6) (intro.) that the rule "conform" with the federal Clean Air Act applies to the rule. The rule analysis should indicate whether the rule conforms with the federal Clean Air Act and if it does not, how it does not conform, to assist readers in reviewing the application of s. 285.11 (6), Stats., to the rule.

11/6/2000

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

The Wisconsin Natural Resources Board proposes an order to to **amend** NR 422.02(8) and (89), 422.04(1)(a) and 439.04(5)(a); and to **create** NR 422.02(7v), (7y), (12m), (21m), (22m), (53d), (53h), (53t), (64m), (75g), (75r), (85m), (87s), (90m), (95m) and (106m) and 422.083, relating to reducing ambient ozone concentrations in southeastern Wisconsin by controlling volatile organic compound (VOC) emissions.

AM-43-00

Analysis Prepared by the Department of Natural Resources

Authorizing statutes: ss. 227.11(2)(a) and 285.11(1) and (6), Stats.

Statutes interpreted: s. 285.11(6), Stats. The State Implementation Plan developed under that provision is revised.

For the purpose of attaining the 1-hour ambient air quality standard for ozone in southeastern Wisconsin, this rule package includes provisions to achieve emission reductions of volatile organic compounds (VOC) from various categories of sources. The rule includes provisions which are specifically required under the Clean Air Act.

The order establishes reasonably available control technology (RACT) emission limits on VOC emissions from plastic parts coating operations at major sources. Major source status is determined by summing all VOC emissions from the source and subtracting any VOC emissions that are subject to existing RACT VOC emission limits from that source wide total. If the resulting difference equals or exceeds the major source threshold for the nonattainment area, the source is classified as major.

Recordkeeping requirements are the minimum necessary and are consistent with those specified for other coating operations addressed in ch. NR 422 that have been previously approved by the board.

SECTION 1. NR 422.02(8) and (89), as affected by Legislative Council

Clearinghouse Rule 00-101, are amended to read:

NR 422.02(8) "Basecoat" means, for one of the following:

(a) For the purpose of wood furniture coating, a coat of colored

material, usually opaque, that is applied before other inks, coatings or opaque finishing materials and which usually has a topcoat subsequently applied for protection.

(b) For the purpose of plastic parts coating, a pigmented coating

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applied after the prime coat and prior to any other pigmented coatings or clear coats.

(89) "Specialty coatings" means, ~~for~~ one of the following:

(a) For the purpose of automobile refinishing operations, coatings used only for discrete portions of the vehicle, such as bumpers or spot repairs, which are necessary due to unusual coating performance requirements. Specialty coatings include, but are not limited to, adhesion promoters, uniform finish blenders, elastomeric coatings, gloss flatteners, bright metal trim repair, jaming (cut-in) clear coats, impact resistant coatings, underbody coatings, weld-through primers and antiglare/safety coatings.

*2- If limited to 422.08, 511 sub-specification -*  
*S. R. includes 4/ include*  
(b) For the purpose of plastic parts coating under s. NR 422.083, coatings used for unusual job performance requirements. These products include, but are not limited to, adhesion primers, soft coatings, reflective argent coatings, electrostatic prep coatings, headlamp lens coatings, ink pad printing coatings, stencil coatings, vacuum metallizing coatings, antiglare/safety coatings, resist coatings and sensitizer coatings.

SECTION 2. NR 422.02(7v), (7y), (12m), (21m), (22m), (53e), (53s), (64m), (75g), (75r), (87s), (85m), (90m), (95m) and (106m) are created to read:

*2- use of 2- 7/25/05 7/21*  
NR 422.02(7v) "Automotive/transportation plastic parts" means the interior and exterior plastic components of automobiles, trucks, tractors, lawnmowers and mobile equipment intended for primary use on

land.

(7y) "Baked coatings" means any coating which is cured or dried in an oven where the temperature of the coated object exceeds 90°C (194°F), or any coating which is cured in any manner that is not described in the definition of air dried coating.

(12m) "Business machine plastic parts" means the plastic housings and other exterior plastic components of electronic office equipment and of medical and musical equipment, including, but not limited to the following: computers, monitors, printers and keyboards, facsimile machines, copiers, microfiche readers, cellular and standard phones, and pencil sharpeners. This definition excludes internal electrical components of business machines.

(21m) "Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings" means coatings used on business machine plastic housings to attenuate electromagnetic and radio frequency interference signals that would otherwise pass through the plastic housing.

(22m) "Electrostatic prep coat" means a coating that is applied to a plastic part solely to provide conductivity in order to use electrostatic application methods for coatings. An electrostatic prep coat usually is clearly identified as an electrostatic prep coat on its accompanying material safety data sheet.

(53d) "Mask coating" means a strippable coating used as a mask during the coating of part or surface.

(53h) "Miscellaneous" means, for the purpose of plastic parts coating, a plastic part not defined as an automotive/transportation

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plastic parts or a business machine plastic part, including but not limited to the following: toys, signs, sporting goods and building products (e.g. doors and shutters).

*S. 2000*  
(53t) "Mobile equipment" means any equipment which may be drawn or is capable of being driven on a roadway, other than motor vehicles, including but not limited to truck or automobile trailers, farm machinery, construction equipment, street cleaners and golf carts.

(64m) "Plastic part" means a piece made from a substance that has been formed from resin through application of pressure or heat or both.

*CK-  
10-2*  
(75g) "Reflective argent coating" means a silver-colored coating that will reflect light.

(75r) "Resist coating" means a coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

(85m) "Sensitizer coating" means a coating that is applied to a plastic part before metallic plating to promote deposits of metal on portions of the plastic part.

*Subjective*  
(87s) "Soft coating" means any coating that provides a soft tactile feel similar to leather and a rich leather-like appearance when applied to plastic interior automotive parts and exterior business machine parts.

(90m) "Stencil coating" means a coating that is applied over a stencil on a plastic part at a thickness of one mil or less of coating solids. Stencil coatings are most frequently letters, numbers or decorative designs.

(95m) "Texture coating" means a coating applied to a plastic part that provides an irregular finished surface such as one that is rough or grainy.

(106m) "Vacuum metallizing" means a process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

SECTION 3. 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~~ 422.083, 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:

$$VOC_A = \frac{\sum_{i=1}^n C_i V_i}{V_T}$$

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 n coatings subject to the same emission limitation, excluding water, applied during any day on the coating line in liters (gallons)

~~2-vent 422.07 (11.5) does not apply.~~  
SECTION 4. NR 422.083 is created to read:

NR 422.083 Plastic parts coating. (1) APPLICABILITY. (a) Except as provided in sub. (3), this section applies to plastic parts coating at facilities which are located in Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha county and have maximum theoretical emissions of VOCs from the facility, excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05, of 25 tons per year or more. → : 40002 (SS)

~~2-500 standard~~  
Note: To determine the maximum theoretical emissions of VOCs from a facility, excluding any maximum theoretical emissions of VOCs specifically subject to the cited provisions, use the following procedure. 1. Calculate the maximum theoretical emissions of VOCs from the facility. 2. Calculate the maximum theoretical emissions of VOCs from the facility subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05. 3. Subtract the emissions calculated in step 2 from the emissions calculated in step 1. 4. If the quantity calculated in step 3 is less than 25 tons per year, then the only requirements of this section which apply to the facility are the recordkeeping requirements of sub. (3).

(b) Except as provided in sub. (3), this section applies to plastic parts coating at facilities which are located in Kewaunee, Manitowoc or Sheboygan county and have maximum theoretical emissions of VOCs from the facility, excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05, of 100 tons per year or more.

Note: To determine the maximum theoretical emissions of VOCs from a facility, excluding any maximum theoretical emissions of VOCs specifically subject to the cited provisions, use the following procedure. 1. Calculate the maximum theoretical emissions of VOCs from the facility. 2. Calculate the maximum theoretical emissions of VOCs from the facility subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05. 3. Subtract the emissions calculated in step 2 from the emissions calculated in step 1. 4. If the quantity calculated in step 3 is less than 100 tons per year, then the only requirements of this section which apply to the facility are the recordkeeping requirements of sub. (3).

(c) This section does not apply to the following:

1. Plastic parts coating regulated under s. NR 422.095, 422.10, 422.11 or 422.145.

2. Plastic parts coating regulated under s. NR 422.09, 422.10 or 422.15 where plastic parts are attached to metal parts prior to the coating of the plastic/metal assembly.

(2) EMISSION LIMITATIONS. (a) After May 1, 2002, no owner or operator of a plastic parts coating operation may cause, allow or permit the emission of any VOCs in excess of the limitations specified

in Table A.

(b) After May 1, 2002, no owner or operator may cause, allow or permit the emission of any VOCs from a facility in excess of 6,200 pounds in any calendar year from the use of extreme performance coatings for plastic parts coating.

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**Table A**  
**VOC Content Limitations for Coatings Used in Plastic Parts Coating**  
[kilogram/liter (pounds/gallon) of coating, excluding water, as applied]

Coating Application and Type	Maximum VOC content
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(a) Automotive/transportation

1. Interiors

a. Baked

*to use of (1)*

Prime coats	0.46 (3.8)
Pigmented coatings (nonprime)	0.49 (4.1)

b. Air dried

Prime coats	0.42 (3.5)
Pigmented coatings (nonprime)	0.38 (3.2)

2. Exteriors

a. Baked

Prime coats (nonelastomeric)	0.54 (4.5)
Prime coats (elastomeric)	0.60 (5.0)
Pigmented coatings (nonprime)	0.55 (4.6)
Clear coats	0.52 (4.3)

b. Air dried

Prime coats	0.66 (5.5)
Pigmented coatings (nonprime - red & black)	0.67 (5.6)

Pigmented coatings (nonprime 0.61 (5.1)  
- other colors)

Clear coats 0.54 (4.5)

3. Specialty

a. Vacuum metallizing basecoats, 0.66 (5.5)  
texture basecoats

b. Black coatings, reflective 0.71 (5.9)  
argent coatings, air bag cover  
coatings and soft coatings

*h-1)*  
c. Antiglare/safety coatings, 0.77 (6.4)  
vacuum metallizing topcoats and  
texture topcoats

d. Stencil coatings, adhesive 0.82 (6.8)  
primers, ink pad printing  
coatings, electrostatic prep  
coatings and resist coatings

e. Head lamp lens coatings 0.89 (7.4)

(b) Business machine

1. Prime coats 0.14 (1.2)

2. Pigmented coatings (nonprime) 0.28 (2.3)

*use of E term*  
3. Electromagnetic interference/radio 0.48 (4.0)  
frequency interference (EMI/RFI)  
shielding coatings

4. Specialty

a. Soft coatings 0.52 (4.3)

b. Resist coatings 0.71 (5.9)

c. Sensitizer coatings	0.85 (7.1)
(c) Miscellaneous	
1. Building shutters	
Pigmented coatings	
Extreme performance coatings	0.75 (6.2)
All others	0.49 (4.1)
2. Signs	
Mask coatings	0.10 (0.8)
Pigmented coatings	
Extreme performance coatings	0.75 (6.2)
All others	0.49 (4.1)
3. Trim for interior office walls and windows	
Pigmented coatings	0.30 (2.5)
4. Weather stripping and molding	
Pigmented coatings	
Extreme performance coatings	0.75 (6.2)
All others	0.49 (4.1)

(3) RECORDKEEPING REQUIREMENTS. (a) To determine applicability under sub. (1)(a) or (b), each owner or operator of a plastic parts coating operation at a facility located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county shall maintain records of the maximum theoretical emissions of VOCs from the facility excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or

419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05.

(b) Any owner or <sup>operator</sup> subject to this section under the applicability criteria of sub. (1)(a) or (b) shall maintain records as described in s. NR 439.04(5).

(c) Records required under this subsection shall be kept for 5 years unless another time period is approved by the department.

SECTION 5. NR 439.04(5)(a)(intro.) 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~~ 422.083, 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 in operation:

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on \_\_\_\_\_.

The rule shall take effect 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 \_\_\_\_\_.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
George E. Meyer, Secretary

(SEAL)

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State of Wisconsin  
Department of Natural Resources

**NOTICE TO PRESIDING OFFICERS  
OF PROPOSED RULEMAKING**

Pursuant to s. 227.19, Stats., notice is hereby given that final draft rules are being submitted to the presiding officer of each house of the legislature. The rules being submitted are:

Natural Resources Board Order No. AM-43-00

Legislative Council Rules Clearinghouse Number 00-174

Subject of Rules Reducing ambient ozone  
concentrations in southeastern Wisconsin  
by controlling volatile organic compound  
(VOC) emissions

Date of Transmittal to Presiding Officers May 1, 2001

Send a copy of any correspondence or notices pertaining to this rule to:

Carol Turner, Rules Coordinator  
DNR Bureau of Legal Services  
LS/5, 101 South Webster

Telephone: 266-1959  
e-mail: [turnec@dnr.state.wi.us](mailto:turnec@dnr.state.wi.us)

An electronic copy of the proposed rule may be obtained by contacting Ms. Turner

## REPORT TO LEGISLATURE

NR 422 and 439, Wis. Adm. Code  
Reducing ambient ozone concentrations in southeastern Wisconsin  
by controlling volatile organic compound (VOC) emissions

Board Order No. AM-43-00  
Clearinghouse Rule No. 00-174

### Statement of Need

The Clean Air Act requires that states apply Reasonably Available Control Technology (RACT) for volatile organic compound (VOC) emissions from major sources located in moderate or worse ozone non-attainment areas. In 1994, the Department submitted information to U.S. EPA regarding non-attainment areas. In that submittal, the Department identified Control Technical Guidance (CTG) RACT requirements. In that submittal, the Department identified sources included in 13 source categories selected by EPA for CTG development. These source categories included industrial cleaning operations, ink manufacturing operations and plastic parts coating operations. EPA still hasn't issued CTGs for these source categories. Consequently, industrial cleaning operations and ink manufacturing operations have been addressed through the development of Clearinghouse Rule No. 00-096. A plastic parts coating VOC RACT rule remains a deficiency in the one-hour ozone attainment plan and the only outstanding requirement for the comprehensive one-hour ozone attainment demonstration due in December 2000.

The proposed revisions will regulate plastic parts coating at major sources in 3 broad industry segments: automotive/transportation, business machines and miscellaneous. The automotive/transportation plastic parts category includes the interior and exterior components of automobiles, trucks, tractors, lawnmowers and other equipment which may be drawn or is capable of being driven on a roadway. The business machine plastic parts category includes the plastic housings and other exterior plastic components of electronic office equipment and of medical and musical equipment, including, but not limited to the following: computers, monitors, printers and keyboards, facsimile machines, copiers, microfiche readers, cellular and standard phones and pencil sharpeners. This category excludes internal electrical components of business machines. The miscellaneous plastic parts categories include items such as signs, weather stripping and shutters.

The proposed coating limitation revisions are being done to keep our regulations current with the federal requirements. The primary emission limitations technique is restricting the VOC content of coatings. However, in addition, compliance can be achieved by using control systems that meet specified requirements.

### Modifications as a Result of Public Hearing

Rule revisions were added which adjusted VOC content limits for coatings and established a later final compliance date. The terminology has been revised to clarify the inclusion or exclusion of opaque, translucent and clear coatings for the appropriate VOC content limits.

## Appearances at the Public Hearing and Their Position

In support – none

In opposition – none

As interest may appear:

Robert J. Musiel, Everbrite, Inc., 315 Marion Avenue, South Milwaukee, WI 53172

Neal Fuchs, Everbrite, Inc., 4949 S. 110<sup>th</sup> Street, Greenfield, WI 53220

Ben Christenson, Small Business Ombudsman, Dept. of Commerce, P.O. Box 7970, Madison, WI

## Response to Legislative Council Rules Clearinghouse Report

The recommended changes were accepted, except for:

2.b. The department should delete the phrase "under s. NR 422.083" in the first sentence in the definition of s. NR 422.02(89)(b) to make this definition consistent with other definitions in s. NR 422.02 that apply to single sections in ch. NR 422. Alternatively, the department should move section-specific definitions in s. NR 422.02 to the section that uses the defined term.

Response: Plastic parts coating can be regulated under other RACT rules depending on the circumstances. For instance, s. NR 422.09, 422.095, 422.10, 422.11, 422.145 or 422.15 can regulate plastic parts coating. Consequently, explicitly restricting the meaning of "specialty coatings" to s. NR 422.083 where it is applied is intentional to avoid its application to other rules that can regulate plastic parts coating.

2.c. The preferred drafting style is to avoid the use of slashed alternatives. [See s. 1.01 (9) (a), Manual] this style was not followed in a number of provisions in the rule, including ss. NR 422.02 (7v), (21m) and 422.083 (1) (c) 2. and in item (a) 3. c. in Table A following s. NR 422.083 (2) (b).

Response: "antiglare/safety coating" has been changed to "anti-glare safety coating".

"plastic/metal assembly" has been changed to "plastic and metal assembly".

"automotive/transportation" is a term frequently used in the USEPA Alternative Control Techniques Document: Surface Coating of Automotive and Business Machine Plastic Parts issued in 1994 upon which a significant portion of the proposed rule is based. Also, the term appears and is defined in other state plastic parts coating rules such as Illinois.

"electromagnetic interference/radio frequency interference (EMI/RFI) coating" is a term used and defined in the USEPA Alternative Control Techniques Document: Surface Coating of Automotive and Business Machine Plastic Parts issued in 1994 upon which a significant portion of the proposed rule is based. Also, the term appears and is defined in other state plastic parts coating rules such as Illinois with the addition of the word: shielding.

2.d. In defining types of coatings in s. NR 422.02, the rule should use consistent terminology, unless there is a substantive reason not to, and express all terms being defined in the singular. For example, s. NR 422.02 (7y) defines "baked coatings," s. NR 422.02 (22m) defines an "electrostatic prep coat" and s. NR 422.02 (53d) defines a "mask coating."

Response: All recommended changes were made with the exception of the definition of electromagnetic interference/radio frequency interference (EMI/RFI) coatings that was accidentally left in the plural form.

2.g. The preferred drafting style is to not use parentheses in the text of the rule. [See s. 1.01 (6), Manual.] This style was not followed in a number of provisions of the rule, including s. NR 422.02 (21m), (53h) and items (a) 2. a. and b. in Table A following s. NR 422.083 (2) (b).

Response: "electromagnetic interference/radio frequency interference (EMI/RFI) coating" is a term used and defined in the USEPA Alternative Control Techniques Document: Surface Coating of Automotive and Business Machine Plastic Parts issued in 1994 upon which a significant portion of the proposed rule is based. Also, the term appears and is defined in other state plastic parts coating rules such as Illinois with the addition of the word: shielding.

s. NR 422.083(53h) has been deleted.

#### Final Regulatory Flexibility Analysis

The proposed revisions will impact major sources of non-RACT regulated VOC emissions with plastic parts coating operations. The major source threshold for sources in Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha counties is 25 tons maximum theoretical emissions (MTE) of non-RACT regulated VOC emissions. The major source threshold for sources in Kewaunee, Manitowoc and Sheboygan counties is 100 tons maximum theoretical emissions (MTE) of non-RACT regulated VOC emissions.

Recordkeeping requirements are the minimum necessary and are consistent with those specified for other coating operations addressed in ch. NR 422.

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

The Wisconsin Natural Resources Board adopts an order to **renumber** NR 422 Table 1, Table 2 and Table 3; to **amend** NR 422.02(5), (8) and (89), 422.04(1)(a), 422.095(4)(a), (b), (c) and (d), 422.135(2)(a) and (b) and 439.04(5)(a)(intro.); and to **create** NR 422.02(7v), (7y), (12m), (21m), (22m), (53e), (53s), (64m), (75g), (75r), (85m), (87s), (90m), (95m) and (106m) and 422.083, relating to reducing ambient ozone concentrations in southeastern Wisconsin by controlling volatile organic compound (VOC) emissions.

AM-43-00

Analysis Prepared by the Department of Natural Resources

Authorizing statutes: ss. 227.11(2)(a) and 285.11(1) and (6), Stats.

Statutes interpreted: s. 285.11(6), Stats. The State Implementation Plan developed under that provision is revised.

The rule fulfills obligations to apply reasonably available control technology (RACT) to major VOC sources in southeastern Wisconsin. The rule includes provisions that are specifically required under the Clean Air Act and conforms to the Clean Air Act pursuant to 42 USC 7511a(b)(2)(C) which states that RACT emission limits for major stationary sources of VOCs in moderate or more extreme ozone nonattainment areas shall be established.

The order establishes RACT emission limits on VOC emissions from plastic parts coating operations at major sources. Major source status is determined by summing all VOC emissions from the source and subtracting any VOC emissions that are subject to existing RACT VOC emission limits from that source wide total. If the resulting difference equals or exceeds the major source threshold for the nonattainment area, the source is classified as major.

Recordkeeping requirements are the minimum necessary and are consistent with those specified for other coating operations addressed in ch. NR 422 that have been previously approved by the board.

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SECTION 1. NR 422.02(5) is amended to read:

NR 422.02(5) "~~Antiglare/safety~~ Anti-glare safety coating" means a low gloss coating formulated to eliminate glare for safety purposes on interior surfaces of a vehicle, as specified under the U.S. department of transportation standard for reflecting surfaces in 49 CFR 571.107, as in effect on October 1, 1994.

SECTION 2. NR 422.02(7v) and (7y) are created to read:

NR 422.02(7v) "Automotive/transportation plastic parts" means the interior and exterior plastic components of automobiles, trucks, tractors, lawnmowers and mobile equipment intended for primary use on land.

(7y) "Baked coating" means any coating which is cured or dried in an oven where the temperature of the coated object exceeds 90°C (194°F), or any other coating which is not an air dried coating.

SECTION 3. NR 422.02(8) is amended to read:

NR 422.02(8) "Basecoat" means, ~~for~~ one of the following:

(a) For the purpose of wood furniture coating, a coat of colored material, usually opaque, that is applied before other inks, coatings or opaque finishing materials and which usually has a topcoat subsequently applied for protection.

(b) For the purpose of plastic parts coating, a coating applied after the prime coat and prior to any other coatings.

SECTION 4. NR 422.02(12m), (21m), (22m) and Note, (53e), (53s), (64m), (75g), (75r), (85m) and (87s) are created to read:

NR 422.02(12m) "Business machine plastic parts" means the plastic housings and other exterior plastic components of electronic office equipment and of medical and musical equipment, including computers, monitors, printers and keyboards, facsimile machines, copiers, microfiche readers, cellular and standard phones, and pencil sharpeners. This definition excludes internal electrical components of business machines.

(21m) "Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings" means coatings used on business machine plastic housings to attenuate electromagnetic and radio frequency interference signals that would otherwise pass through the plastic housing.

(22m) "Electrostatic prep coating" means a coating that is applied to a plastic part solely to provide conductivity in order to use electrostatic application methods for coatings.

Note: An electrostatic prep coating usually is clearly identified as an electrostatic prep coating on its accompanying material safety data sheet.

(53e) "Mask coating" means a strippable coating used as a mask during the coating of a part or surface.

(53s) "Mobile equipment" means any equipment which may be drawn or is capable of being driven on a roadway, other than motor vehicles, including truck or automobile trailers, farm machinery, construction equipment, street cleaners and golf carts.

(61m) "Pad printing" means, for the purpose of plastic parts coating, a type of printing used on irregularly shaped substrates, in which the image is transferred from a metal or plastic photoengraved or intaglio plate called a cliché, to an intermediate silicon rubber pad and, ultimately, to the substrate. Ink is supplied to the engraved portions of the cliché after each impression.

(64m) "Plastic part" means a piece made from a substance that has been formed from resin through application of pressure or heat or both.

(75g) "Reflective argent coating" means a silver-colored coating that will reflect light.

(75r) "Resist coating" means a coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

(85m) "Sensitizer coating" means a coating that is applied to a plastic part before metallic plating to promote deposits of metal on portions of the plastic part.

(87s) "Soft coating" means any coating that provides a soft tactile feel and appearance similar to surfaces such as leather when applied to plastic parts.

SECTION 5. NR 422.02(89) is amended to read:

NR 422.02(89) "Specialty coatings coating" means ~~for one of the following:~~

(a) For the purpose of automobile refinishing operations, coatings used only for discrete portions of the vehicle, such as bumpers or spot repairs, which are necessary due to unusual coating performance requirements. Specialty coatings include, but are not limited to, adhesion promoters, uniform finish blenders, elastomeric coatings, gloss flatteners, bright metal trim repair, jambering (cut-in) clear coats, impact resistant coatings, underbody coatings, weld-through primers and antiglare/safety anti-glare safety coatings.

(b) For the purpose of plastic parts coating under s. NR 422.083, coatings used for unusual job performance requirements. These products include adhesion primers, soft coatings, reflective argent coatings, electrostatic prep coatings, headlamp lens coatings, pad printing coatings, stencil coatings, vacuum metallizing coatings, anti-glare safety coatings, resist coatings and sensitizer coatings.

SECTION 6. NR 422.02(90m), (95m) and (106m) are created to read:

NR 422.02(90m) "Stencil coating" means a coating that is applied over a stencil on a plastic part at a thickness of one mil or less of coating solids. Stencil coatings are most frequently letters, numbers or decorative designs.

(95m) "Texture coating" means a coating applied to a plastic part that provides an irregular finished surface such as one that is rough or grainy.

(106m) "Vacuum metallizing" means a process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

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~~ 422.083, 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:

$$VOC_A = \frac{\sum_{i=1}^n C_i V_i}{V_T}$$

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  $n$  coatings subject to the same emission limitation, excluding water, applied during any day on the coating line in liters (gallons)

SECTION 8. In NR 422, Table 1, Table 2 and Table 3 are renumbered Table 2, Table 3 and Table 4.

SECTION 9. NR 422.083 is created to read:

**NR 422.083 Plastic parts coating. (1) APPLICABILITY.** (a) Except as provided in sub. (4), this section applies to plastic parts coating at facilities which are located in Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha county and have maximum theoretical emissions of VOCs from the facility, excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05, of 25 tons per year or more.

Note: To determine the maximum theoretical emissions of VOCs from a facility, excluding any maximum theoretical emissions of VOCs specifically subject to the cited provisions, use the following procedure. 1. Calculate the maximum theoretical emissions of VOCs from the facility. 2. Calculate the maximum theoretical emissions of VOCs from the facility subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05. 3. Subtract the emissions calculated in step 2 from the emissions calculated in step 1. 4. If the quantity calculated in step 3 is less than 25 tons per year, then the only requirements of this section which apply to the facility are the recordkeeping requirements of sub. (4).

(b) Except as provided in sub. (4), this section applies to plastic parts coating at facilities which are located in Kewaunee, Manitowoc or Sheboygan county and have maximum theoretical emissions of VOCs from the facility, excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05, of 100 tons per year or more.

Note: To determine the maximum theoretical emissions of VOCs from a facility, excluding any maximum theoretical emissions of VOCs specifically subject to the cited provisions, use the following procedure. 1. Calculate the maximum theoretical emissions of VOCs from the facility. 2. Calculate the maximum theoretical emissions of VOCs from the facility subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05. 3. Subtract the emissions calculated in step 2 from the emissions calculated in step 1. 4. If the quantity calculated in step 3 is less than 100 tons per year, then the only requirements of this section which apply to the facility are the recordkeeping requirements of sub. (4).

(c) This section does not apply to the following:

1. Plastic parts coating regulated under s. NR 422.095, 422.11 or 422.145.
2. Plastic parts coating regulated under s. NR 422.10 or 422.15 where plastic parts are attached to metal parts prior to the coating of the plastic and metal assembly.

(2) EXEMPTIONS. The application of touch-up coatings is exempt from the requirements of this section.

(3) EMISSION LIMITATIONS. After December 31, 2002, no owner or operator of a plastic parts coating operation may cause, allow or permit the emission of any VOCs in excess of the limitations specified in Table 1. If more than one VOC content limitation in Table 1 applies to a coating, the lowest VOC content limitation shall be satisfied.

**Table 1**  
**VOC Content Limitations for Coatings Used in Plastic Parts Coating**  
[kilogram/liter (pounds/gallon) of coating, excluding water, as applied]

Coating Application and Type	Maximum VOC content
(a)Automotive/transportation	
1. Interiors	
a. Baked	
Prime coats	0.46 (3.8)
Other nonclear coatings	0.49 (4.1)
b. Air dried	
Prime coats	0.42 (3.5)
Other nonclear coatings	0.59 (4.9)
2. Exteriors	
a. Baked	
Nonelastomeric prime coats	0.54 (4.5)
Elastomeric prime coats	0.60 (5.0)

Clear coats	0.52 (4.3)
Other coatings	0.55 (4.6)
b. Air dried	
Prime coats	0.66 (5.5)
Clear coats	0.54 (4.5)
Other coatings, red and black	0.67 (5.6)
Other coatings	0.61 (5.1)
3. Specialty	
a. Adhesive primers	0.82 (6.8)
b. Air bag cover coatings	0.71 (5.9)
c. Anti-glare safety coatings	0.77 (6.4)
d. Electrostatic prep coatings	0.82 (6.8)
e. Head lamp lens coatings	0.89 (7.4)
f. Pad printing coatings	0.82 (6.8)
g. Reflective argent coatings	0.71 (5.9)
h. Resist coatings	0.82 (6.8)
i. Soft coatings	0.71 (5.9)
j. Stencil coatings	0.82 (6.8)
k. Texture basecoats	0.66 (5.5)
l. Texture topcoats	0.77 (6.4)
m. Vacuum metallizing basecoats	0.66 (5.5)
n. Vacuum metallizing topcoats	0.77 (6.4)
(b) Business machine	
1. Prime coats	0.35 (2.9)
2. Other nonclear coatings	0.35 (2.9)

3. Specialty

a. Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings	0.48 (4.0)
b. Resist coatings	0.71 (5.9)
c. Sensitizer coatings	0.85 (7.1)
d. Soft coatings	0.52 (4.3)

(c) Miscellaneous categories

1. Air cleaner covers	0.72 (6.0)
2. Building exterior molding, trim, shutters and weather stripping	0.75 (6.2)
3. Building interior molding and trim	0.30 (2.5)
4. Cosmetic cases	
a. Opaque coatings	0.58 (4.8)
b. Other coatings	0.71 (5.9)
5. Personal hygiene razors	
a. Soft coatings	0.66 (5.5)
b. Other coatings	0.75 (6.2)
6. Signs	
a. Mask coatings	0.10 (0.8)
b. Opaque coatings	0.71 (5.9)
c. Other coatings	0.78 (6.5)
7. Smoke detector covers	0.75 (6.2)

(4) RECORDKEEPING REQUIREMENTS. (a) To determine applicability under sub. (1)(a) or (b), each owner or operator of a plastic parts coating operation at a facility located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county

shall maintain records of the maximum theoretical emissions of VOCs from the facility excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05.

(b) Any owner or operator subject to this section under the applicability criteria of sub. (1)(a) or (b) shall maintain records as described in s. NR 439.04(5).

(c) Records required under this subsection shall be kept for 5 years unless another time period is specified under s. NR 439.04(2).

SECTION 10. NR 422.095(4)(a) to (d) are amended to read:

NR 422.095(4)EMISSION LIMITATIONS-COATINGS. (4) EMISSION LIMITATIONS – COATING. (a) No owner or operator of an automobile refinishing operation may refinish or allow the refinishing of any motor vehicles or their body parts and components using any coating or coating system with a VOC content in excess of that specified in ~~Table 1~~ Table 2. All coatings and coating components shall be used according to manufacturer's specifications and mixing instructions.

(b) The most restrictive VOC limitation in ~~Table 1~~ Table 2 applies with either of the following:

1. Different combinations or mixing ratios of coatings and coating components are used which constitute a different coating system than any of the systems listed in ~~Table 1~~ Table 2.

2. The same combination and mixing ratio of coating components is used for more than one category in ~~Table 1~~ Table 2.

(c) Automobile refinishing coatings and coating components manufactured prior to January 11, 1999 are exempt from the emission limitations in ~~Table 1~~ Table 2.

(d) The maximum VOC content for any category of coating in ~~Table 1~~ Table 2 shall be calculated according to the following formula:

$$\text{VOC} = \frac{(W_v - W_w - W_{ec})}{(V - V_w - V_{ec})}$$

where:

VOC content is the pounds of VOC per gallon of coating

$W_v$  is the mass of total volatiles, in pounds

$W_w$  is the mass of water, in pounds

$W_{ec}$  is the mass of exempt compounds, in pounds

$V$  is the volume of coating, in gallons

$V_w$  is the volume of water, in gallons

$V_{ec}$  is the volume of exempt compounds, in gallons

SECTION 11. NR 422.135(2)(a) and (b) are amended to read:

NR 422.135(2)(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 2~~ Table 3.

(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 3~~ Table 4.

SECTION 12. NR 439.04(5)(a)(intro.) 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 ~~422.083~~, 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 in operation:

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on April 25, 2001.

The rule shall take effect 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 \_\_\_\_\_.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Darrell Bazzell, Secretary

(SEAL)