The statement of scope for this rule, SS 015-19, was approved by the Governor on January 30, 2019, published in Register No. 758A1 on February 4, 2019, and approved by the Natural Resources Board on April 10, 2019. This rule was approved by the Governor on June 3, 2021.

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

The Wisconsin Natural Resources Board adopts an order to **repeal** NR 422.083 (1) (a) (Note) and (1) (b) (Note), 439.04 (4) (e) to (g); to **renumber** NR 422.02 (1), (54m); to **renumber and amend** NR 422.083 (1) (a) and 439.04 (5) (a) 2.; to **amend** NR 419.02 (intro.), 421.02 (intro.), 422.02 (intro.), 422.03 (intro.) and (7), 422.04 (1) (a), 422.05 (1m) (intro.), 422.06 (1m) (intro.), 422.08 (1m) (intro.), 422.083 (title), (1) (b), (c) 1., 2., and (4), 422.127 (title), (1) (intro.), (a) and (b), 422.14 (1m) (intro.), 422.145 (1m) (intro.), 422.15 (title) and (1) (am) 2., 423.035 (2) (a) 1., 423.037 (2) (a) 1., 425.04 (3) (a), 439.04 (4) (intro.), (a), (b), (c), (d), (5) (a) (intro.), and (f) (intro.), and 484.10 Table 5 Rows (9) and (25m); and to **create** NR 400.02 (intro), 422.01 (3), (4) and (Note), 422.02 (1d), (1h), (3g) (3r), (4g), (4r), (10m) and (Note), (12o), (12q), (15m), (19f), (19v), (19x), (20q), (20u), (20y), (21d), (21j), (25g), (25r), (32m), (34d), (34v), (36m), (38m), (41e), (41m), (41s), (42d), (42h) and (Note), (42s), (45s), (53k), (54a), (54b), (54c), (54d), (54e), (54f) and (Note), (54g), (54h), (54i) and (Note), (54j), (54k), (54L), (540), (54y) and (Note), (57s), (58m), (61s), (63m), (64g), (64q), (64u), (65e), (65m), (65s), (66m), (74m) and (Note), (75m), (80f) and (Note), (86e), (86m), (86s), (87d), (87h), (87L), (93m), (95s), (100m), (104m), (106s), and (109s), 422.083 (1) (ag), 422.084, 422.127 (1) (c), 422.128, 422.15 (1) (ag) and (10), 422.151, and 439.04 (5) (a) 2. b., relating to implementing reasonably available control technology for volatile organic compound emissions from miscellaneous metal and plastic parts coatings and miscellaneous industrial adhesives and affecting small business.

#### **AM-20-18**

#### **Analysis Prepared by the Department of Natural Resources**

- **1. Statute Interpreted:** Sections 285.11(6) and 285.14(1), Stats. The State Implementation Plan developed under s. 285.11(6), Stats. is revised.
- **2. Statutory Authority:** Sections 285.11(6) and 285.14(1), Stats.
- **3. Explanation of Agency Authority:** The department has the authority to develop, revise and implement comprehensive plans for the prevention, abatement and control of air pollution. These plans, which may include rules and control strategies, must conform with the federal Clean Air Act (CAA).
- **4. Related Statutes or Rules:** The proposed rule revisions correspond to the source categories covered under the existing VOC rule provisions:

NR 422.083: Plastics parts coating

NR 422.127: Use of adhesives

NR 422.15: Miscellaneous metal parts and products

Additional administrative code sections revised related to the VOC RACT rule revisions above:

NR 400.02: Definitions

NR 419.02: Definitions

NR 421.02: Definitions

NR 422.01: Applicability

NR 422.02: Definitions

NR 422.03: Exemptions

NR 422.04: Methods of compliance

NR 423.035: Industrial cleaning operations – part 1.

NR 423.037: Industrial cleaning operations – part 2.

NR 425.04: Exceptions and non-ozone season allowances

NR 439.04: Recordkeeping

NR 484.10: American Society for Testing and Materials

**5. Plain Language Analysis:** Volatile organic compounds (VOCs) react with nitrogen oxides in the presence of sunlight to form ground-level ozone. Concentrations of ozone above the National Ambient Air Quality Standards (NAAQS) are known to adversely impact human health and the environment. The U.S. Environmental Protection Agency (EPA) has designated several areas in eastern Wisconsin as "nonattainment areas" due to ozone concentrations exceeding the NAAQS. Emissions sources located in nonattainment areas are subject to more stringent controls under the Clean Air Act (CAA).

Section 182(b)(2) of the CAA requires states to implement VOC reasonably available control technology (RACT) regulations in any ozone nonattainment area classified as "moderate" or above. The State's VOC RACT program must include regulations that reflect the latest Control Techniques Guidelines (CTGs) issued by EPA for specific source categories.

In 2008, EPA released two updated CTGs that provided recommendations for three source categories: miscellaneous plastic parts coating, miscellaneous metal parts coating, and miscellaneous industrial adhesives. The department started rulemaking around 2009 to incorporate these CTGs into rule. At the time, however, it was unclear whether the 2008 CTGs would be challenged in court and possibly modified. After several years, it became clear that the CTGs would not be litigated. They ultimately did not change, and have been in effect since 2008. This rulemaking effort began in 2018, and the scope statement was published in the Administrative Register on February 4, 2019.

Because Wisconsin has had several ozone nonattainment areas subject to this requirement since the CTGs were issued (Sheboygan County and eastern Kenosha County), the department is proposing to update its existing VOC RACT regulations to reflect the latest EPA CTGs. This will ensure the state remains in compliance with CAA Section 182(b)(2) requirements as they apply to moderate and higher ozone nonattainment areas. Wisconsin's compliance with all CAA requirements, including ensuring compliance with up-to-date RACT rules, will ensure the state has a legally sufficient state implementation plan (SIP) and allow the state to redesignate eligible ozone nonattainment areas to attainment more quickly.

The department is proposing to revise its existing VOC RACT regulations to reflect these EPA CTGs. The current VOC RACT rules (referred to as "Part I" rules) for metal and plastic parts coatings and adhesive use will continue to apply in the state. The updated VOC RACT requirements ("Part II" rules) will apply in the state's ozone nonattainment areas that have been classified as moderate (or above) for any national ozone standard promulgated in or after 2008. An affected source will either be subject to the Part I rule or the Part II rule for that source category. This will ensure requirements are neither redundant nor conflicting, while still ensuring the state remains in compliance with the CAA's VOC RACT requirements.

The proposed rule changes are primarily associated with the addition of the Part II rules, which incorporate the CTGs' VOC content limits for specific types of coatings and adhesives. Additionally, the department is proposing to make several additions, corrections, and clarifications within ch. NR 422 *Control of Organic Compound Emissions from Surface Coating, Printing, and Asphalt Surfacing* 

*Operations* that affect current rule language for these source categories. The specific proposed rule changes are described below.

# Clarification of existing rule language

SECTION 4 clarifies that once a source becomes subject to a VOC RACT rule in ch. NR 422, it remains subject to the rule regardless of future reductions in emissions ("once in, always in"), unless an approved federally enforceable permit or SIP revision permanently restricts the source's production, capacity utilization, or the hours of operation so that the source's maximum theoretical emissions, as defined in s. NR 419.02 (11), are below the applicability threshold(s) in ch. NR 422. This clarification meets the applicable federal VOC RACT exemption requirements identified in EPA's August 23, 1990 memorandum from G. T. Helms titled, "'Once-in/Always-in' Requirement for Applicability." While existing text throughout ch. NR 422 had been interpreted by the department to have this effect, the proposed SECTION 4 language in s. NR 422.01 (3) establishes clear "once in, always in" applicability for all of ch. NR 422. Clarification of the "once in, always in" language is necessary to ensure EPA approval of the proposed rule. SECTIONS 10, 12 through 14, 26, and 27 delete the existing, fragmented occurrences of "once in, always in" language in ss. NR 422.03, 422.05 (1m), 422.06 (1m), 422.08 (1m), 422.14 (1m), and 422.145 (1m).

#### **Definitions**

SECTIONS 7 and 9 create 74 definitions to ensure consistency with the CTGs for each unique, currently-undefined coating and adhesive term used in the three proposed Part II rules.

SECTIONS 22 and 32 create definitions within the proposed *Miscellaneous metal parts and products* – *part II* and *Plastic parts coating* – *part II* rules for seven terms whose current s. NR 422.02 definition differs from the CTG definition. The proposed definitions for these seven terms ensure consistency with the CTGs and only apply to sources covered by the proposed Part II rules. This was done to meet VOC RACT requirements, but so as not to inadvertently impact other sections of ch. NR 422.

#### Adoption of CTGs as "Part II" rules

SECTION 22 incorporates the Miscellaneous Metal and Plastic Parts Coatings CTG's VOC control measures for plastic parts coatings.

SECTION 25 incorporates the Miscellaneous Industrial Adhesives CTG's VOC control measures for adhesive use.

SECTION 32 incorporates the Miscellaneous Metal and Plastic Parts Coatings CTG's VOC control measures for miscellaneous metal parts and products coatings.

These proposed Part II rules will apply to sources that meet the applicability threshold in areas of the state that have been classified as moderate (or higher) for any national ozone standard promulgated in or after 2008.

SECTIONS 11 and 33 through 41 update current *Methods of compliance* (s. NR 422.04), *Industrial cleaning operations – part 1 and part II* (ss. NR 423.035 and 423.037), *Exceptions and non-ozone season allowances* (s. NR 425.04), and *Recordkeeping* (s. NR 439.04) language to include references to the proposed Part II rules.

# Corrections

SECTION 10 eliminates conflicts between current language in s. NR 422.03 (7), which establishes exemptions from ch. NR 422 limits for facilities using 55 gallons or less of a coating, and current exemption language in s. NR 422.095. The proposed changes also avoid a conflict with proposed s. NR 422.084 *Plastic parts coating – Part II* exemption language.

SECTIONS 30 and 31 correct an error made in the AM-44-10 rulemaking, which inadvertently removed the counties of Kewaunee, Manitowoc, and Walworth from the *Miscellaneous metal parts and products – Part I* rule (s. NR 422.15 (1) (am) 2.).

SECTIONS 17 and 20 remove two notes describing the maximum theoretical emission calculation from the *Plastic parts coating – Part I* rule (s. NR 422.083 (1)), as notes are not enforceable and the information in the notes are provided elsewhere in ch. NR 422.

SECTIONS 16 and 19 update the types of VOC emissions that should be excluded from a source's maximum theoretical emissions in s. NR 422.083 *Plastic parts coatings – part I*. The proposed changes correct errors in past rulemakings, which failed to update references to sections of ch. NR 422.

The proposed changes to ch. NR 422 are expected to apply to between seven and 32 sources, depending on the classification of ozone nonattainment areas at the time the rules are finalized. Seven sources are related to the re-incorporation of the three counties into the *Miscellaneous metal parts and products* – *Part I* rule and up to 25 sources (depending on ozone nonattainment area classification and the magnitude of the sources' VOC emissions) are related to incorporation of the three new Part II rules. Based on engagement with industry, it is expected that many sources are already meeting some or all of the requirements contained in the proposed rule. The department's recent experience working with several sources that would be affected by this rule is that no changes in operations or controls at these sources were necessary, as they were already meeting the VOC content limits of the applicable CTG.

- **6. Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations:** The proposed revisions to the plastic parts coating, miscellaneous metal parts coating and adhesive coating VOC RACT regulations are based directly on the latest EPA CTGs. The rules regulate VOC emissions from individual coating lines with emissions above specified thresholds, as well as regulating VOC cleaning solvent work practices.
- 7. Summary of Any Public Comments and Feedback on the Statement of Scope of the Proposed Rule Received at Any Preliminary Public Hearing and Comment Period. Include How and to What Extent the Agency Took Those Comments and Feedback into Account in Drafting the Proposed Rule: A preliminary public hearing was held pursuant to s. 227.136, Stats., on March 8, 2019. Written comments were also accepted until March 18, 2019. No comments were received from the preliminary public hearing and comment period on the statement of scope of the proposed rule.
- **8.** Comparison with Similar Rules in Adjacent States: Illinois and Indiana have similar administrative rules that reflect the latest federal CTGs. Indiana was included in this analysis because portions of Wisconsin, Illinois, and Indiana comprise a tri-state nonattainment area for the 2008 and the 2015 ozone NAAQS. Minnesota, Iowa, and Michigan do not have any nonattainment areas subject to this requirement and therefore are not required to have updated VOC RACT regulations.

- **9.** Summary of Factual Data and Analytical Methodologies Used and How Any Related Findings Support the Regulatory Approach Chosen: The revised plastic parts coating rule, adhesive use rule, and the miscellaneous metal parts and products coating rule are based on CTGs issued by EPA in 2008 for these categories. All the recommended control measures in these CTGs are incorporated into the new rules. The current VOC RACT rules for these source categories will continue to apply in other areas of the state.
- 10. Analysis and Supporting Documents Used to Determine the Effect on Small Business or in Preparation of an Economic Impact Report: Analysis conducted by the department indicates that the proposed control requirements may impact one small business. The number of potentially affected facilities was estimated from state emission reporting and inventory estimates. Estimated cost per facility to comply with these CTGs was provided by EPA in its CTG documents and has been adjusted by the department using a national inflation calculator to 2020 dollars.

The work practices for coating-related activities and cleaning materials are considered standard industrial practice. Most, if not all, facilities already implement solvent cleaning work practices that would meet the requirements of the rule changes. The proposed rule establishes those standard work practices as requirements.

**11. Effect on Small Business (initial regulatory flexibility analysis):** The DNR anticipates that the total cost to the single small business as a result of this rule will be approximately \$13,440. More specific cost estimates are provided below.

# Miscellaneous metal and plastic parts coating (ss. NR 422.151 and 422.084, Wis. Adm. Code)

The DNR estimates that one small business may be impacted by the proposed miscellaneous metal and plastic parts coating rules in ss. NR 422.151 and 422.084, Wis. Adm. Code. DNR estimates that 23 facilities in Wisconsin's ozone nonattainment areas conduct activities related to miscellaneous metal and plastic parts coating; however, only a small percentage of facilities will have emissions above the applicability threshold for VOC RACT in any given year. Of these 23 facilities, only one facility that is considered a small business, based on the definition in s. 227.114 (1), Stats., is known to the department to emit VOCs related to miscellaneous metal and plastic parts coating in excess of the threshold.

In its 2008 CTG, EPA estimated the national average cost of this RACT control is an annualized cost of \$10,500/facility in 2007 dollars. Updated for 2020, the cost for RACT control is an annualized cost of \$13,440/facility. This gives a total estimated annualized cost to implement RACT control for small businesses using the updated CTG limits for miscellaneous metal and plastic parts coating processes of \$13,440.

# Miscellaneous industrial adhesives (s. NR 422.128, Wis. Adm. Code)

The DNR does not anticipate small businesses to be impacted by the proposed adhesive use rule in s. NR 422.128, Wis. Adm. Code. DNR estimates that nine facilities in Wisconsin's ozone nonattainment areas currently conduct activities involving miscellaneous industrial adhesives applications; however, in the past five years, none of the facilities have had emissions above the applicability threshold for VOC RACT in any given year.

Given that no facilities considered small businesses are known to the department to currently be emitting VOCs related to adhesive use in excess of the threshold, the total estimated annualized cost to implement RACT control for small businesses using the updated CTG limits for miscellaneous industrial adhesives applications is \$0.

- **12. Agency Contact Person:** Olivia Salmon, Department of Natural Resources, P.O. Box 7921, Madison, WI 53707-7921; OliviaE.Salmon@wisconsin.gov; (608) 630-5264
- **13.** Place where comments are to be submitted and deadline for submission: A public hearing was held on January 25, 2021. Written comments were accepted through February 1, 2021.

# **RULE TEXT**

**SECTION 1.** NR 400.02 (intro.) is created to read:

**NR 400.02 Definitions.** Except when another definition is specifically made applicable, in chs. NR 401 to 499:

**SECTION 2.** NR 419.02 (intro.) is amended to read:

NR 419.02 Definitions. The Except when another definition is specifically made applicable, the definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms except when another definition is specifically made applicable, in this chapter and in chs. NR 420 to 425::

**SECTION 3.** NR 421.02 (intro.) is amended to read:

NR 421.02 Definitions. The Except when another definition is specifically made applicable, the definitions contained in chs. NR 400, 419, and 420 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used except when another definition is specifically made applicable, in this chapter and in chs. NR 422 to 425:

SECTION 4. NR 422.01 (3), (4), and (Note) are created to read:

NR 422.01 (3) For a source located in an area that was ever designated nonattainment for ozone that had VOC emissions exceeding the applicability emission thresholds and became subject to the requirements of this chapter, the requirements of this chapter remain applicable

notwithstanding any subsequent decrease in VOC emissions to a level below the applicability emission thresholds.

(4) The department may exempt a source from the requirements of this chapter if the source has an approved federally enforceable permit or state implementation plan revision that permanently restricts maximum theoretical emissions to below the applicability emission thresholds listed under this chapter and meets all applicable federal VOC RACT exemption requirements.

Note: "Maximum theoretical emissions" referred to in this chapter is defined under s. NR 419.02 (11).

# **SECTION 5. NR 422.02 (intro.) is amended to read:**

NR 422.02 The Except when another definition is specifically made applicable, the definitions contained in chs. NR 400, 419, and 421 apply to the terms used in this chapter. In addition, except when another definition is specifically made applicable, the following definitions apply to the terms used in this chapter:

**SECTION 6. NR 422.02 (1) is renumbered (1m).** 

SECTION 7. NR 422.02 (1d), (1h), (3g) (3r), (4g), (4r), (10m) and (Note), (12o), (12q), (15m), (19f), (19v), (20q), (20u), (20y), (21d) (21j), (25g), (25r), (32m), (34d), (34v), (36m), (38m), (41e), (41m), (41s), (42d), (42h) and (Note), (42s), (45s), (53j), (53k), (54a), (54b), (54c), (54d), (54e), (54f) and (Note), (54g), (54h), (54i) and (Note), (54j), (54k) and (54L) are created to read:

**NR 422.02 (1d)** "Acrylonitrile-butadiene-styrene welding" or "ABS welding" means any process to weld acrylonitrile-butadiene-styrene pipe.

(1h) "Adhesion primer" means a coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating and that is clearly identified as an adhesion primer or adhesion promoter on its accompanying material safety data sheet.

- (3g) "Aerosol adhesive" means an adhesive or adhesive primer packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment.
- (3r) "Air assisted airless spray" means a spray coating method that combines compressed air with hydraulic pressure to atomize the coating material into finer droplets than is achieved with pure airless spray. Lower hydraulic pressure is used than with airless spray.
- (**4g**) "Airless spray" means a spray coating method in which the coating is atomized by forcing it through a small opening at high pressure and in which the coating liquid is not mixed with air before exiting from the nozzle.
- (4r) "Antifoulant coating" means any coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms and that is registered with EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act.
  - (10m) "Black coating" means a coating that meets all of the following criteria:
  - (a) Maximum lightness: 23 units.
  - (b) Saturation: less than 2.8, where saturation equals the square root of  $A^2 + B^2$ .

Note: The criteria under this subsection are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, maximum lightness is 33 units.

- (120) "Camouflage coating" means a coating used, principally by the military, to conceal equipment from detection.
- (12q) "Ceramic tile installation adhesive" means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.
- (15m) "Coating" means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes, including paints, varnishes, sealants, adhesives, inks, maskants, and temporary protective coatings.
  - (19f) (a) "Contact adhesive" means an adhesive that is all of the following:

- 1. Designed for application to bond 2 surfaces together.
- 2. Allowed to dry before the 2 surfaces are placed in contact with each other.
- 3. Forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other.
- 4. Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.
  - (b) "Contact adhesive" does not include any of the following:
  - 1. Rubber cements that are primarily intended for use on paper substrates.
  - 2. Vulcanizing fluids that are designed and labeled for tire repair only.
- (19v) "Cove base" means a flooring trim unit, generally made of vinyl or rubber, that has a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.
- (19x) "Cove base installation adhesive" means any adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.
- (20q) "Cyanoacrylate adhesive" means any adhesive with a cyanoacrylate content of at least 95 percent by weight.
- (20u) "Dip coating" means a method of applying coatings in which the part to be coated is submerged in a tank filled with the coating.
- (20y) "Drum" means any cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.
- (21d) "Electric dissipating coating" means a coating that rapidly dissipates a high voltage electric charge.

- (21j) "Electric-insulating varnish" means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.
- (25g) "EPDM roof membrane" means a prefabricated single sheet of elastomeric material composed of ethylene propylene diene monomer and that is field applied to a building roof using one layer or membrane material.
- (25r) "Etching filler" means a coating that contains less than 23 percent solids by weight and at least 0.5 percent acid by weight and is used instead of applying a pretreatment coating followed by a primer.
- (32m) "Finish primer surfacer" means a coating applied with a wet film thickness of less than 10 mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.
- (34d) "Flexible coating" means a coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation, as those terms are defined by the original equipment manufacturer.
- (34v) "Flexible vinyl" means non-rigid polyvinyl chloride plastic with a 5 percent by weight plasticizer content.
- (36m) "Fog coat" means a coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture and that is not applied at a thickness of more than 0.5 mils of coating solids.
- (38m) "Gloss reducer" means a coating that is applied to a plastic part solely to reduce the shine of the part and that is not applied at a thickness of more than 0.5 mils of coating solids.
- (41e) "High bake" means a coating that is designed to cure only at temperatures of more than 194°F.

- (41m) "High build primer surfacer" means a coating applied with a wet film thickness of 10 mils or more prior to the application of a topcoat for any of the following purposes:
  - (a) Providing corrosion resistance.
  - (b) Providing adhesion of subsequent coatings.
  - (c) Providing a moisture barrier.
  - (d) Promoting a uniform surface necessary for filling in surface imperfections.
- (41s) "High gloss coating" means a coating that achieves at least 85 percent reflectance on a 60° glossmeter when tested by ASTM D 523-89, incorporated by reference under s. NR 484.10 (9).
- (42d) "High temperature coating" means a coating that is certified to withstand a temperature of 1000°F for 24 hours.
- (42h) "High-volume, low-pressure spray" means equipment used to apply coatings by means of a spray gun that operates between 0.1 and 10 psig air pressure.

Note: High-volume, low-pressure is also referred to as HVLP.

- (42s) (a) "Indoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll, or artificial grass.
- (b) "Indoor floor covering installation adhesive" does not include an adhesive used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl.
- (45s) "Laminate" means a product made by bonding together 2 or more layers of material.
- (53j) "Metal to urethane/rubber molding or casting adhesive" means any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded

rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.

- (53k) "Military specification coating" means a coating that has a formulation approved by a United States military agency for use on military equipment.
- (54a) "Mold seal coating" means the initial coating applied to a new mold or a repaired mold to provide a smooth surface that, when coated with a mold release coating, prevents products from sticking to the mold.
- (54b) "Motor vehicle adhesive" means an adhesive, including glass bonding adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied for the purpose of bonding 2 vehicle surfaces together without regard to the substrates involved.
- (54c) "Motor vehicle bedliner" means a multi-component coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.
- (**54d**) "Motor vehicle cavity wax" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied into the cavities of a vehicle primarily for the purpose of enhancing corrosion protection.
- (54e) "Motor vehicle deadener" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.
- (**54f**) (a) "Motor vehicle gasket/gasket sealing material" means a fluid, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to coat a gasket or replace and perform the same function as a gasket.
- (b) "Motor vehicle gasket/gasket sealing material" includes room temperature vulcanization seal material.

Note: Room temperature vulcanization is also referred to as RTV.

- (**54g**) (a) "Motor vehicle glass bonding primer" means a primer, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass.
- (b) "Motor vehicle glass bonding primer" includes a glass bonding or cleaning primer that cleans and primes a windshield or other glass, or body openings, prior to the application of adhesive or the installation of adhesive bonded glass.
- (54h) "Motor vehicle lubricating wax/compound" means a protective lubricating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.
- (54i) "Motor vehicle sealer" means a high viscosity material, used at a facility that is not an automobile or light-duty truck assembly coating facility, generally applied in a paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings, such as primer-surfacer, that has a primary purpose of filling body joints completely so that there is no intrusion of water, gases, or corrosive materials into the passenger area of the body compartment.

Note: Motor vehicle sealers are also referred to as sealants, sealant primers, or caulks.

- (54j) "Motor vehicle trunk interior coating" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the trunk interior to provide chip protection.
- (54k) "Motor vehicle underbody coating" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion or provide chip protection, or both.
- (54L) "Motor vehicle weatherstrip adhesive" means an adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle.

**SECTION 8. NR 422.02 (54m) is renumbered (54p).** 

SECTION 9. NR 422.02 (540), (54y) and (Note), (57s), (58m), (61s), (63m), (64g), (64q), (64u), (65e), (65m), (65s), (66m), (74m) and (Note), (75m), (80f) and (Note), (86e), (86m), (86s), (87d), (87h), (87L), (93m), (95s), (100m), (104m), (106s), and (109s) are created to read:

**NR 422.02 (540)** "Multi-colored coating" means a coating that exhibits more than one color when applied and that is packaged in a single container and applied in a single coat.

(54y) "Multipurpose construction adhesive" means an adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including drywall, subfloor, panel, fiberglass reinforced plastic, ceiling tile, and acoustical tile.

Note: Fiberglass reinforced plastic is also referred to as FRP.

(57s) "Optical coating" means a coating applied to an optical lens.

(58m) "Outdoor floor covering installation adhesive" means an adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

- (61s) "Pan-backing coating" means a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.
- (63m) "Perimeter bonded sheet vinyl floor covering installation" means the installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to 4 inches wide around the perimeter of the sheet flooring.
- (64g) "Plastic" means a synthetic material chemically formed by the polymerization of carbon-based substances that is usually compounded with modifiers, extenders, or reinforcers and is capable of being molded, extruded, cast into various shapes and films, or drawn into filaments.

- (64q) "Plastic solvent welding adhesive" means an adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.
- (64u) "Plastic solvent welding adhesive primer" means a primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.
- (65e) "Pleasure craft" is a vessel that is manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a person or business for recreational purposes.
- (65m) "Pleasure craft coating" means a marine coating, except unsaturated polyester resin or fiberglass coatings, applied by brush, spray, roller, or other means to a pleasure craft.
- (65s) (a) "Porous material" means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including paper and corrugated paperboard.
  - (b) "Porous material" does not include wood.
- (66m) "Prefabricated architectural component coating" means a coating applied to metal parts and products that are to be used as part of an architectural structure.
  - (74m) "Red coating" means a coating that meets all of the following criteria:
  - (a) Yellow limit: the hue of hostaperm scarlet.
  - (b) Blue limit: the hue of monastral red-violet.
  - (c) Lightness limit for metallics: 35 percent aluminum flake.
  - (d) Lightness limit for solids: 50 percent titanium dioxide white.
  - (e) Solid reds: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units.
  - (f) Metallic reds: hue angle of -16 to 35 degrees and maximum lightness of 28 to 45 units.

Note: The criteria under this subsection are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, the upper limit is 49 units. The maximum lightness

varies as the hue moves from violet to orange. This is a natural consequence of the strength of the colorants, and real colors show this effect.

- (75m) "Reinforced plastic composite" means a composite material consisting of plastic reinforced with fibers.
- (80f) "Rubber" means any natural or manmade rubber substrate, including styrenebutadiene rubber, polychloroprene, butyl rubber, nitrile rubber, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

Note: Polychloroprene is also referred to as neoprene.

- (86e) (a) "Sheet rubber lining installation" means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion.
  - (b) "Sheet rubber lining installation" includes laminating sheet rubber to fabric by hand.
- (86m) "Shock-free coating" means a coating applied to electrical components to protect the user from electric shock that has characteristics of being of low capacitance and high resistance and is resistant to breaking down under high voltage.
- (86s) "Silicone release coating" means a coating that contains silicone resin and is intended to prevent food from sticking to metal surfaces, such as baking pans.
- (87d) (a) "Single-ply roof membrane" means a prefabricated single sheet of rubber, normally ethylene propylene diene terpolymer, that is field applied to a building roof using one layer of membrane material.
- (b) "Single-ply roof membrane" does not include a membrane prefabricated from ethylene propylene diene monomer.
- (87h) "Single-ply roof membrane adhesive primer" means a primer labeled for use to clean and promote adhesion of single-ply roof membrane seams or splices prior to bonding.

(87L) (a) "Single-ply roof membrane installation and repair adhesive" means an adhesive labeled for use in the installation or repair of single-ply roof membrane.

# (b) In this subsection:

- 1. "Installation" includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, and ducts that protrude through the membrane.
- 2. "Repair" includes gluing the edges of torn membrane together, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane.
- (93m) "Structural glazing" means a process that includes the application of adhesive to bond glass, ceramic, metal, stone, or composite panels to exterior building frames.
- (95s) "Thin metal laminating adhesive" means an adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line is less than 0.25 millimeters.
- (100m) "Tire repair" means a process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.
- (104m) "Translucent coating" means a coating that contains binders and pigment and is formulated to form a colored, but not opaque, film.
- (106s) "Vacuum metalizing coating" means the undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film.
- (109s) "Waterproof resorcinol glue" means a 2-part resorcinol-resin-based adhesive designed for applications in which the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

# **SECTION 10.** NR 422.03 (intro.) and (7) are amended to read:

NR 422.03 Exemptions. Sections NR 422.04 to 422.155 apply to any facility which that 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). Exemptions include any of the following:

(7) Coatings and inks which that are subject to an emission limitation under this chapter ss. NR 422.05 to 422.083, 422.085, 422.09, or 422.10 to 422.17, but which that do not comply with the applicable emission limitation, if the aggregate use of these noncompliant coatings and inks at the facility does not exceed 55 gallons during any 12 consecutive months.

# SECTION 11. 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 422.083422.084, 422.09 to 422.12, 422.132, 422.135, 422.15, 422.151, 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:

$$VOC_A = \begin{bmatrix} \sum_{i=1}^{n} C_i V_i \end{bmatrix} V_T$$

where:

VOCA 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

Ci 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

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

VT 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 12.** NR 422.05 (1m) (intro.) is amended to read:

NR 422.05 (1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

# **SECTION 13.** NR 422.06 (1m) (intro.) is amended to read:

NR 422.06 (1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

# **SECTION 14.** NR 422.08 (1m) (intro.) is amended to read:

NR 422.08 (1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

# **SECTION 15.** NR 422.083 (title) is amended to read:

NR 422.083 (title) Plastic parts coating <u>- part 1</u>.

# SECTION 16. NR 422.083 (1) (a) is renumbered (ar) and amended to read:

NR 422.083 (1) (ar) Except as provided in under sub. (4), subs. (3) and (4) apply to plastic parts coating at facilities which that are located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha and which that 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 ss. NR 423.03, 423.035, to 423.05, or s. NR 424.04 or 424.05, of 25 tons per year or more.

**SECTION 17.** NR 422.083 (1) (a) (Note) is repealed.

# SECTION 18. NR 422.083 (1) (ag) is created to read:

NR 422.083 (1) (ag) The requirements of this section do not apply to any facility with a plastic parts coating operation meeting the applicability requirements contained in s. NR 422.084 (1) beginning on the effective date of this rule [LRB inserts date].

# **SECTION 19. NR 422.083 (1) (b) is amended to read:**

NR 422.083 (1) (b) Except as provided in-under sub. (4), subs. (3) and (4) apply to plastic parts coating at facilities that are located in the county of Kewaunee, Manitowoc, or Sheboygan and which that 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 to 423.05, 424.04, or 424.05, of 100 tons per year or more.

**SECTION 20.** NR 422.083 (1) (b) (Note) is repealed.

# **SECTION 21.** NR 422.083 (1) (c) 1. and 2. and (4) (a) are amended to read:

**NR 422.083 (1)** (c) 1. Plastic parts coating regulated under s. NR 422.095, 422.11, 422.115, or 422.145.

- 2. Plastic parts coating regulated under s. NR 422.10-or, 422.15, or 422.151 where plastic parts are attached to metal parts prior to the coating of the plastic and metal assembly.
- (4) RECORDKEEPING REQUIREMENTS. (a) To determine applicability under sub. (1) (ar) 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, to 423.05, 424.04, or 424.05.

# SECTION 22. NR 422.084 is created to read:

- **NR 422.084** Plastic parts coating part 2. (1) APPLICABILITY. Beginning on the effective date of this rule [LRB inserts date], this section applies to all plastic parts coating operations at a facility that meets all of the following criteria:
  - (a) The facility is located in any of the following areas:
- 1. An area that is classified as a moderate, serious, severe, or extreme ozone nonattainment area.
  - 2. Any area that meets all the following criteria:
- a. The area had been classified as a moderate, serious, severe, or extreme ozone nonattainment area for a National Ambient Air Quality Standard, as defined in s. NR 489.02 (21), for ozone promulgated in or after 2008.
- b. The area was subsequently reclassified as a marginal ozone nonattainment area or redesignated to an attainment area for ozone.
- (b) The facility has actual VOC emissions, before consideration of controls, from all miscellaneous metal parts and products coating operations, plastic parts coating operations, and related cleaning activities equal to or greater than 2.7 tons per year based on any consecutive 12-month period.
- (2) DEFINITIONS. Notwithstanding the definitions contained in s. NR 422.02, the following definitions apply in this section:

- (a) "Electromagnetic interference/radio frequency interference shielding coating" means a coating used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static discharge.
- (b) "Mask coating" means a thin film coating applied through a template to coat a small portion of a substrate.
- (c) "Pretreatment wash primer" means a coating that contains no more than 12 percent solids, by weight, and at least 0.50 percent acid, by weight, as measured according to ASTM D1613-02, incorporated by reference under s. NR 484.10 (25m), and that is used to provide surface etching, corrosion resistance, and adhesion of subsequent coatings.
- (d) "Stencil coating" means an ink or a pigmented coating that is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, or numbers.
- (e) "Texture coating" means a coating applied to a plastic part that, in its finished form, consists of discrete raised spots of the coating.
- (3) EXEMPTIONS. (a) The following activities, materials, and coating lines are exempt from this section:
  - 1. Aerospace coatings.
  - 2. Shipbuilding and repair coatings.
  - 3. Coatings for fiberglass boat manufacturing.
  - 4. Aerosol coating operations.
- 5. Coatings that are applied to test panels and coupons as part of research and development, quality control, or performance testing activities at paint research or manufacturing facilities.
- 6. Coating operations regulated under s. NR 422.095, 422.11, or 422.115 for large appliance coatings.

- 7. Use of adhesives regulated under s. NR 422.127 or 422.128.
- (b) Plastic part coating operations using any of the following types of coatings are exempt from the VOC content limitations specified under sub. (4):
  - 1. Touch-up and repair coatings.
  - 2. Stencil coatings applied on clear or transparent substrates.
- 3. Clear coats or translucent coatings, except for clear coats or translucent coatings applied to automotive and transportation parts.
- 4. Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings.
- 5. Any individual coating category used in volumes less than 50 gallons in any one year, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed 200 gallons per year, per facility.
  - 6. Reflective coatings applied to highway cones.
- 7. Mask coatings that are less than 0.5 millimeter thick when dried and the area coated is less than 25 square inches.
  - 8. Electromagnetic interference/radio frequency interference shielding coatings.
- 9. Heparin-benzalkonium chloride containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 100 gallons per year, per plastic parts coating operation.
- (c) All of the following types of coatings for automotive, transportation, or business machines are exempt from the VOC content limitations specified under sub. (4):
  - 1. Texture coatings for automotive or transportation parts.
  - 2. Vacuum metalizing coatings.

- 3. Gloss reducers.
- 4. Texture topcoats for automotive or transportation parts.
- 5. Adhesion primers.
- 6. Electrostatic prep coatings.
- 7. Resist coatings.
- 8. Stencil coatings.
- (d) All of the following types of coating operations are exempt from the coating application method requirements specified under sub. (5):
  - 1. Airbrush operations using 5 gallons or less per year of coating.
  - 2. The use of extreme high-gloss coatings for pleasure craft coating.
- (4) EMISSION LIMITS. (a) Except as specified under par. (b), the owner or operator of a plastic parts coating operation located at an affected facility under this section shall use the low-VOC coatings that meet the VOC content limits in Table 1C for the affected plastic parts coating operations. If more than one VOC content limit applies to a specific coating, the most stringent VOC content limit shall be applied.

Table 1C
VOC Content Limitations for Coatings Used in Plastic Parts Coating – Low VOC
Coatings

[kilogram/liter (pounds/gallons) of coating, excluding water and exempt compounds listed in s. NR 400.02 (162) (a), as applied]

Coating Application and Type	Maximum VOC Content
1. Plastic Parts and Products Coatings – General (see	_
Note)	
a. General One-Component	0.28 (2.3)
b. General Multi-Component	0.42 (3.5)
c. Electric Dissipating Coatings and Shock-Free	0.80 (6.7)
Coatings	
d. Extreme Performance – 2 pack	0.42 (3.5)
e. Metallic	0.42 (3.5)
f. Military Specification – 1 pack	0.34 (2.8)
g. Military Specification – 2 pack	0.42 (3.5)

h. Mold-Seal	0.76 (6.3)
i. Multi-colored Coatings	0.68 (5.7)
j. Optical Coatings	0.80 (6.7)
k. Vacuum Metalizing	0.80 (6.7)
2. Automotive and Transportation	
a. High Bake Coatings – Interior and Exterior Parts	
Flexible Primer	0.54 (4.5)
Non-flexible Primer	0.42 (3.5)
Base Coat	0.52 (4.3)
Clear Coat	0.48 (4.0)
Non-Basecoat/Clear Coat	0.52 (4.3)
b. Low Bake/Air Dried Coatings – Exterior Parts	0.02 ()
Primer	0.58 (4.8)
Base Coat	0.60 (5.0)
Clear Coat	0.54 (4.5)
Non-Basecoat/Clear Coat	0.60 (5.0)
c. Low Bake/Air Dried Coatings – Interior Parts	0.60 (5.0)
d. Touchup and Repair Coatings	0.62 (5.2)
d. Touchup and Repair Coatings	0.02 (3.2)
3. Business Machine Coatings	
a. Primers	0.35 (2.9)
b. Topcoat	0.35 (2.9)
c. Texture Coat	0.35 (2.9)
d. Fog Coat	0.26 (2.2)
e. Touch and Repair	0.35 (2.9)
· · · · · · · · · · · · · · · · · · ·	,
4. Pleasure Craft Surface Coating	
a. Extreme High-Gloss Topcoat	0.49 (4.1)
b. High Gloss Topcoat	0.42 (3.5)
c. Pretreatment Wash Primers	0.78 (6.5)
d. Finish Primer Surfacer	0.42 (3.5)
e. High Build Primer Surfacer	0.34 (2.8)
f. Aluminum Substrate Antifoulant Coating	0.56 (4.7)
g. Other Substrate Antifoulant Coating	0.33 (2.8)
h. All Other Pleasure Craft Surface Coatings	0.42 (3.5)
	(2.2.)
5. Motor Vehicle Materials	
a. Motor Vehicle Cavity Wax	0.65 (5.4)
b. Motor Vehicle Sealer	0.65 (5.4)
c. Motor Vehicle Deadener	0.65 (5.4)
d. Motor Vehicle Gasket/Gasket Sealing Material	0.20 (1.7)
e. Motor Vehicle Underbody Coating	0.65 (5.4)
f. Motor Vehicle Trunk Interior Coating	0.65 (5.4)
g. Motor Vehicle Bed Liner	0.20 (1.7)
h. Motor Vehicle Lubricating Wax/Compound	0.70 (5.8)

Note: The VOC content limits for the coating and application types under Table 1C rows 1. a. to k. apply to any coating that does not meet the definitions for the specific coatings listed under Table 1C rows 2. a. to 5. h.

- (b) If the low-VOC coatings that meet the VOC content limits required under par. (a) are not used at an affected facility, the owner or operator shall use add-on control equipment that achieves a minimum overall emission reduction efficiency of 90 percent for VOC.
- (5) APPLICATION METHODS. An owner or operator of an affected facility under this section, except for a facility that uses add-on control equipment as described under sub. (4) (b), shall use one or a combination of the following application methods for the affected coating operations:
  - (a) Electrostatic application.
  - (b) High-volume, low-pressure spray equipment.
  - (c) Flow coating.
  - (d) Roll coating.
  - (e) Dip coating, including electrodeposition.
  - (f) Airless spray.
  - (g) Air-assisted airless spray.
- (h) Other coating application methods that are capable of achieving a transfer efficiency equivalent to or better than achieved by high-volume, low-pressure spraying and are approved by the department in writing.
- (6) ADD-ON CONTROL EQUIPMENT REQUIREMENTS. An owner or operator that uses add-on control equipment as described under sub. (4) (b) shall comply with the applicable monitoring, testing, and recordkeeping requirements specified under ss. NR 439.04 (5) (e), 439.055, and 439.075.
- (7) WORK PRACTICES FOR COATING-RELATED ACTIVITIES. The owner or operator of an affected facility under this section shall do all of the following for coating-related activities:

- (a) Store all VOC-containing coatings, thinners, and coating-related waste materials in closed containers.
- (b) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, and coating-related waste materials are kept closed at all times, except when depositing or removing those materials.
- (c) Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials.
- (d) Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.
- **(8)** CLEANING MATERIAL WORK PRACTICES. The owner or operator of an affected facility under this section shall do all of the following for cleaning materials:
- (a) Store all VOC-containing cleaning materials and used shop towels in closed containers.
- (b) Ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing those materials.
- (c) Convey VOC-containing cleaning materials from one location to another in closed containers or pipes.
  - (d) Minimize spills of VOC-containing cleaning materials.
- (e) Minimize emissions of VOCs during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.
- (9) RECORDKEEPING REQUIREMENTS. (a) An owner or operator subject to the VOC content limitations under sub. (4) (a) shall maintain records as described under s. NR 439.04 (5) (a).

- (b) Records required under this subsection shall be kept for the time period specified under s. NR 439.04 (2).
- (10) COMPLIANCE SCHEDULE AND CERTIFICATION. (a) *Compliance schedule*. The owner or operator of a facility with plastic parts coating operations shall comply with the applicable requirements of this section upon the facility becoming subject to this section as provided under sub. (1), except for any of the following:
- 1. The owner or operator of a facility with plastic parts coating operations subject to this section that commenced construction before the effective date of this rule [LRB inserts date] shall comply with applicable requirements of this section within 180 days after the effective date of this rule [LRB inserts date]. Any facility that was subject to s. NR 422.083 before the effective date of this rule [LRB inserts date] shall continue to comply with the requirements in s. NR 422.083 until the date when the facility is in compliance with the applicable requirements of this section or until 180 days after the effective date of this rule [LRB inserts date], whichever is sooner.
- 2. The owner or operator of a facility with plastic parts coating operations that becomes subject to this section due to either the designation or the reclassification of a nonattainment area that occurs after the effective date of this rule [LRB inserts date], shall comply with applicable requirements of this section 180 days after the effective date of the nonattainment designation or reclassification, as indicated by the relevant Federal Register publication.
- (b) *Certification*. No later than 60 days after the compliance deadline specified under par. (a), the owner or operator of a facility with plastic parts coating operations subject to this section shall submit to the department written certification that all affected plastic parts coating operations are in compliance with the applicable requirements of this section. The owner or operator of a facility subject to s. NR 422.083 before the effective date of this rule [LRB inserts date] that is required to have an operation permit under ch. NR 407 shall submit to the department a permit application or a permit revision or renewal application that meets the requirements of s. NR 407.05 to meet this certification requirement, except that no application shall be required for a source operating under a general operation permit or a registration operation permit issued under s. NR 407.10 or 407.105.

# SECTION 23. NR 422.127 (title), (1) (intro.), (a) and (b) are amended to read:

NR 422.127 Use of adhesives <u>- part 1</u>. (1) APPLICABILITY. This section applies to the use of adhesives or adhesive primers on wood furniture, office partitions, or wood entry or passage doors process lines in any facility <u>whichthat</u> is involved in the manufacturing of wood furniture, office partitions, or wood entry or passage doors. This section does not apply to-<u>either any</u> of the following:

- (a) Furniture metal coating lines subject to s. NR 422.10 or 422.105.
- (b) Miscellaneous metal parts and products coating lines subject to s. NR 422.15 or 422.151.

# **SECTION 24.** NR 422.127 (1) (c) is created to read:

**NR 422.127 (1)** (c) Beginning on the effective date of this rule [LRB inserts date], the use of adhesives or adhesive primers at any facility meeting the applicability requirements contained in s. NR 422.128 (1).

#### **SECTION 25.** NR 422.128 is created to read:

**NR 422.128** Use of Adhesives – part 2. (1) APPLICABILITY. Beginning on the effective date of this rule [LRB inserts date], this section applies to adhesives or adhesive primers application processes at a facility that meets all of the following criteria:

- (a) The facility is located in any of the following areas:
- 1. An area that is classified as a moderate, serious, severe, or extreme ozone nonattainment area.
  - 2. Any area that meets all the following criteria:
- a. The area had been classified as a moderate, serious, severe, or extreme ozone nonattainment area for a National Ambient Air Quality Standard, as defined in s. NR 489.02 (21), for ozone promulgated in or after 2008.

- b. The area was subsequently reclassified as a marginal ozone nonattainment area or redesignated to an attainment area for ozone.
- (b) The facility has actual VOC emissions from the use of adhesives and adhesive primers, before consideration of controls, equal to or greater than 2.7 tons per year based on any consecutive 12-month period.
- (2) EXEMPTIONS. (a) Any adhesive or adhesive primer application process subject to s. NR 421.04, 422.06, 422.075, 422.08, 422.105, 422.115, 422.131, 422.141, 422.143, or 422.144 is exempt from the requirements of this section.
- (b) All of the following types of adhesives and adhesive primers application processes are exempt from the VOC emission limitations specified under sub. (3):
- 1. Adhesives or adhesive primers being tested or evaluated in any research and development, quality assurance, or analytical laboratory.
- 2. Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems.
  - 3. Adhesives or adhesive primers used in medical equipment manufacturing operations.
  - 4. Cyanoacrylate adhesive application processes.
  - 5. Aerosol adhesive application processes.
- 6. Processes using polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities.
- 7. Processes using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 16 ounces or less or a net weight of one pound or less.
- (3) EMISSION LIMITS. (a) Except as specified under par. (b), the owner or operator of an affected adhesive or adhesive primer application process located at an affected facility under this section shall use the low-VOC adhesives or adhesive primers that meet the VOC content limits in Table 2C for the affected adhesive or adhesive primer application processes. For general

adhesive application processes using an adhesive to bond dissimilar substrates, the highest VOC emission limitation applies.

Table 2C

VOC Content Limitations for Adhesives and Adhesive Primers

[gram/liter (pounds/gallons) of adhesive or adhesive primer, excluding water and exempt compounds listed in s. NR 400.02 (162) (a), as applied]

Type of Adhesive Application Process	Maximum VOC Content
1. General Adhesive Application Processes	, , , , , , , , , , , , , , , , , , , ,
(see Note)	
a. Reinforced Plastic Composite	200 (1.7)
b. Flexible Vinyl	250 (2.1)
c. Metal	30 (0.3)
d. Porous Material (Except Wood)	120 (1.0)
e. Rubber	250 (2.1)
f. Wood	30 (0.3)
g. Other Substrates	250 (2.1)
2. Specialty Adhesive Application Processes	
a. Ceramic Tile Installation	130 (1.1)
b. Contact Adhesive	250 (2.1)
c. Cove Base Installation	150 (1.3)
d. Floor Covering Installation (Indoor)	150 (1.3)
e. Floor Covering Installation (Outdoor)	250 (2.1)
f. Floor Covering Installation (Perimeter	660 (5.5)
Bonded Sheet Vinyl)	` ,
g. Metal to Urethane/Rubber Molding or Casting	850 (7.1)
h. Motor Vehicle Adhesive	250 (2.1)
i. Motor Vehicle Weatherstrip Adhesive	750 (6.3)
j. Multipurpose Construction	200 (1.7)
k. Plastic Solvent Welding (ABS)	400 (3.3)
1. Plastic Solvent Welding (Except ABS)	500 (4.2)
m. Sheet Rubber Lining Installation	850 (7.1)
n. Single-Ply Roof Membrane	250 (2.1)
Installation/Repair (Except EPDM)	200 (2.1)
o. Structural Glazing	100 (0.8)
p. Thin Metal Laminating	780 (6.5)
q. Tire Repair	100 (0.8)
r. Waterproof Resorcinol Glue	170 (1.4)
3. Adhesive Primer Application Processes	
a. Motor Vehicle Glass Bonding Primer	900 (7.5)
b. Plastic Solvent Welding Adhesive	650 (5.4)
Primer Primer	050 (5.4)
c. Single-Ply Roof Membrane Adhesive Primer	250 (2.1)
d. Other Adhesive Primer	250 (2.1)

Note: The VOC content limits for the adhesive and application types under Table 2C rows 1. a. to g. apply to any adhesive or adhesive primer that does not meet the definitions for the specific coatings listed under Table 2C rows 2. a. to 3. d.

- (b) If the low-VOC adhesives or adhesive primers that meet the VOC content limits required under par. (a) are not used at an affected facility, the owner or operator shall use add-on control equipment that achieves a minimum overall emission reduction efficiency of 85 percent for VOC.
- **(4)** APPLICATION METHODS. An owner or operator of an affected facility under this section shall use one or a combination of the following application methods:
  - (a) Electrostatic application.
  - (b) High-volume, low-pressure spray equipment.
  - (c) Flow coating.
- (d) Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application.
  - (e) Dip coating, including electrodeposition.
  - (f) Airless spray.
  - (g) Air-assisted airless spray.
- (h) Other adhesive application methods that are capable of achieving a transfer efficiency equivalent to or better than that achieved by high-volume, low-pressure spraying and are approved by the department in writing.
- (5) ADD-ON CONTROL EQUIPMENT REQUIREMENTS. An owner or operator that uses add-on control equipment as described under sub. (3) (b) shall comply with the applicable monitoring, testing, and recordkeeping requirements specified under ss. NR 439.04 (5) (e), 439.055, and 439.075.

- **(6)** WORK PRACTICES FOR ADHESIVE APPLICATION PROCESSES. The owner or operator of an affected facility under this section shall do all of the following for adhesive or adhesive primer application processes:
- (a) Store all VOC-containing adhesives, adhesive primers, and process-related waste materials in closed containers.
- (b) Ensure that mixing and storage containers used for VOC-containing adhesives, adhesive primers, and process-related waste materials are kept closed at all times, except when depositing or removing those materials.
- (c) Minimize spills of VOC-containing adhesives, adhesive primers, and process-related waste materials.
- (d) Convey VOC-containing adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes.
- (7) CLEANING MATERIAL WORK PRACTICES. The owner or operator of an affected facility under this section shall do all of the following for cleaning materials:
- (a) Store all VOC-containing cleaning materials and used shop towels in closed containers.
- (b) Ensure that storage containers used for VOC-containing materials are kept closed at all times, except when depositing or removing those materials.
- (c) Convey VOC-containing cleaning materials from one location to another in closed containers or pipes.
  - (d) Minimize spills of VOC-containing cleaning materials.
- (e) Minimize emissions of VOCs during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.

- (8) RECORDKEEPING REQUIREMENTS. (a) An owner or operator subject to the VOC content limitations under sub. (3) (a) shall maintain records as described under s. NR 439.04 (5) (a).
- (b) Records required under this subsection shall be kept for the time period specified under s. NR 439.04 (2).
- (9) COMPLIANCE SCHEDULE AND CERTIFICATION. (a) *Compliance schedule*. The owner or operator of a facility shall comply with the applicable requirements of this section upon the facility becoming subject to this section as provided under sub. (1), except for any of the following:
- 1. The owner or operator of a facility subject to this section that commenced construction before the effective date of this rule [LRB inserts date] shall comply with applicable requirements of this section 180 days after the effective date of this rule [LRB inserts date]. Any facility that was subject to s. NR 422.127 before the effective date of this rule [LRB inserts date] shall continue to comply with the requirements in s. NR 422.127 until the date when the facility is in compliance with the applicable requirements of this section or until 180 days after the effective date of this rule [LRB inserts date], whichever is sooner.
- 2. The owner or operator of a facility that becomes subject to this section due to either the designation or the reclassification of a nonattainment area that occurs after the effective date of this rule [LRB inserts date], shall comply with applicable requirements of this section within 180 days after the effective date of the nonattainment designation or reclassification, as indicated by the relevant Federal Register publication.
- (b) *Certification*. No later than 60 days after the compliance deadline specified under par. (a), the owner or operator of a facility subject to this section shall submit to the department written certification that all affected adhesive or adhesive primer application processes are in compliance with the applicable requirements of this section. The owner or operator of a facility subject to s. NR 422.127 before the effective date of this rule [LRB inserts date] that is required to have an operation permit under ch. NR 407 shall submit to the department a permit application or a permit revision or renewal application that meets the requirements of s. NR 407.05 to meet

this certification requirement, except that no application shall be required for a source operating under a general operation permit or a registration operation permit issued under s. NR 407.10 or 407.105.

# **SECTION 26.** NR 422.14 (1m) (intro.) is amended to read:

NR 422.14 (1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

# **SECTION 27.** NR 422.145 (1m) (intro.) is amended to read:

NR 422.145 (1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

# **SECTION 28.** NR 422.15 (title) is amended to read:

NR 422.15 Miscellaneous metal parts and products <u>- part 1</u>.

# SECTION 29. NR 422.15 (1) (ag) is created to read:

**NR 422.15** (1) (ag) The requirements of this section do not apply to any facility with miscellaneous metal parts and products coating operations meeting the applicability requirements contained in s. NR 422.151 (1) beginning on the effective date of this rule [LRB inserts date].

# **SECTION 30. NR 422.15 (1) (am) 2. is amended to read:**

**NR 422.15** (1) (am) 2. Any facility located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, <u>Kewaunee, Manitowoc</u>, Outagamie, Rock, <u>Walworth</u>, or Winnebago and which that has VOC emissions, before consideration of controls, from all miscellaneous metal parts and products coating lines, greater than or equal to 10 tons per year.

# SECTION 31. NR 422.15 (10) is created to read:

NR 422.15 (10) COMPLIANCE SCHEDULE AND CERTIFICATION. (a) Compliance schedule. The owner or operator of a miscellaneous metal parts and products facility described under sub. (1) (am) and located in Kewaunee, Manitowoc, or Walworth county that commenced construction before the effective date of this rule [LRB inserts date], shall comply with the applicable requirements of this section within 180 days after the effective date of this rule [LRB inserts date].

(b) *Certification*. No later than 60 days after the compliance deadline specified under par. (a), the owner or operator of a miscellaneous metal parts and products facility described in par. (a) shall submit to the department written certification that all affected miscellaneous metal parts and products coating operations are in compliance with the applicable requirements of this section. Any such facility that is required to have an operation permit under ch. NR 407 shall submit to the department a permit application or a permit revision or renewal application that meets the application requirements under s. NR 407.05 to meet this certification requirement, except that no application shall be required for a source operating under a general operation permit or a registration operation permit issued under s. NR 407.10 or 407.105.

# **SECTION 32.** NR 422.151 is created to read:

NR 422.151 Miscellaneous metal parts and products – part 2. (1) APPLICABILITY. Beginning on the effective date of this rule [LRB inserts date], this section applies to all coating line application areas, conveyors, flashoff areas, drying areas, forced-air driers, and ovens of any industry categorized under the 2-digit major groups of 33 to 39 as described in the Standard Industrial Classification Manual, 1987, incorporated by reference under s. NR 484.05 (1), that are involved in the surface coating of miscellaneous metal parts and products at a facility that meets all of the following criteria:

- (a) The facility is located in any of the following areas:
- 1. An area that is classified as a moderate, serious, severe, or extreme ozone nonattainment area.
  - 2. Any area that meets all the following criteria:

- a. The area had been classified as a moderate, serious, severe, or extreme ozone nonattainment area for a National Ambient Air Quality Standard, as defined in s. NR 489.02 (21), for ozone promulgated in or after 2008.
- b. The area was subsequently reclassified as a marginal ozone nonattainment area or redesignated to an attainment area for ozone.
- (b) The facility has actual VOC emissions, before consideration of controls, from all miscellaneous metal parts and products coating operations, plastic parts coating operations, and related cleaning activities equal to or greater than 2.7 tons per year based on any consecutive 12-month period.
- (2) DEFINITIONS. Notwithstanding the definitions contained in s. NR 422.02, the following definitions apply in this section:
- (a) 1. "Extreme performance coating" means a coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to any of the following:
- a. Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, or chemical mixtures or solutions.
  - b. Repeated exposure to temperatures in excess of 250°F.
- c. Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.
- 2. "Extreme performance coating" includes coatings applied to locomotives, railroad cars, farm machinery, and heavy-duty trucks.
- (b) "Pretreatment coat" means a coating that contains no more than 12 percent solids by weight, and at least 0.50 percent acid, by weight, as measured according to ASTM D1613-02, incorporated by reference under s. NR 484.10 (25m), that is used to provide surface etching, and that is applied to provide corrosion resistance, adhesion, and ease of stripping.

- (c) "Pretreatment wash primer" means a coating that contains no more than 12 percent solids, by weight, and at least 0.50 percent acid, by weight, as measured according to ASTM D1613-02, incorporated by reference under s. NR 484.10 (25m), and that is used to provide surface etching, corrosion resistance, and adhesion of subsequent coatings.
- (d) "Stencil coating" means an ink or a pigmented coating that is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, or numbers.
- (e) "Texture coating" means a coating applied to a plastic part that, in its finished form, consists of discrete raised spots of the coating.
- (3) EXEMPTIONS. (a) The following activities, materials, and coating lines are exempt from this section:
  - 1. Aerospace coatings.
  - 2. Shipbuilding and repair coatings.
  - 3. Coatings for fiberglass boat manufacturing.
  - 4. Aerosol coating operations.
- 5. Coatings that are applied to test panels and coupons as part of research and development, quality control, or performance testing activities at paint research or manufacturing facilities.
  - 6. Coating lines covered under ss. NR 422.05 to 422.12.
  - 7. Use of adhesives regulated under s. NR 422.127 or 422.128.
- (b) Metal coating operations using the following types of coatings are exempt from the VOC content limitations specified under sub. (4) and the application methods specified under sub. (5):
  - 1. Stencil coatings.

- 2. Safety-indicating coatings.
- 3. Solid-film lubricants.
- 4. Electric-insulating and thermal-conducting coatings.
- 5. Magnetic data storage disk coatings.
- 6. Plastic extruded onto metal parts to form a coating.
- (c) Metal coating operations using the following types of coatings are exempt from the application methods specified under sub. (5):
  - 1. Touch-up coatings.
  - 2. Repair coatings.
  - 3. Texture coatings.
- (4) EMISSION LIMITS. (a) Except as specified under par. (b), the owner or operator of a metal parts coating operation located at an affected facility under this section shall use the low-VOC coatings that meet the VOC content limits in Table 6 for the affected metal coating operations. If more than one VOC content limit applies to a specific coating, the most stringent VOC content limit shall be applied.

Table 6
VOC Content Limitations for Coatings Used in Metal Parts and Products Coating – Low-VOC Coatings

[kilogram/liter (pounds/gallons) of coating, excluding water and exempt compounds listed in s. NR 400.02 (162) (a), as applied]

Coating Application and Type	Maximum VOC Content
1 A' D' 1/ N/)	
1. Air Dried (see Note)	
<ul> <li>a. General One-Component</li> </ul>	0.34 (2.8)
b. General Multi-Component	0.34 (2.8)
c. Camouflage	12 (3.5)
d. Electric-Insulating Varnish	12 (3.5)
e. Etching Filler	0.42 (3.5)
f. Extreme High-Gloss	0.42 (3.5)
g. Extreme Performance	0.42 (3.5)
h. Heat-Resistant	0.42 (3.5)

<ol> <li>High Performance Architectural</li> </ol>	0.74 (6.2)
j. High Temperature	0.42(3.5)
k. Metallic	0.42 (3.5)
1. Military Specification	0.34 (2.8)
m. Mold-Seal	0.42 (3.5)
n. Pan-Backing	0.42 (3.5)
$\mathcal{E}$	
o. Prefabricated Architectural Multi-	0.42 (3.5)
Component	
p. Prefabricated Architectural One-	0.42(3.5)
Component	
q. Pretreatment Coatings	0.42 (3.5)
r. Repair and Touch Up	0.42 (3.5)
s. Silicone Release	0.42 (3.5)
t. Solar-Absorbent	0.42 (3.5)
	0.42 (3.5)
u. Vacuum Metalizing	
v. Drum Coating, New, Exterior	0.34 (2.8)
w. Drum Coating, New, Interior	0.42 (3.5)
x. Drum Coating, Reconditioned, Exterior	0.42 (3.5)
y. Drum Coating, Reconditioned, Interior	0.50(4.2)
2. Baked (see Note)	
a. General One-Component	0.28 (2.3)
b. General Multi-Component	0.28 (2.3)
c. Camouflage	12 (3.5)
d. Electric-Insulating Varnish	12 (3.5)
e. Etching Filler	0.42 (3.5)
f. Extreme High-Gloss	0.36 (3.0)
g. Extreme Performance	0.36 (3.0)
h. Heat-Resistant	0.36(3.0)
i. High Performance Architectural	0.74 (6.2)
j. High Temperature	0.42 (3.5)
k. Metallic	0.42 (3.5)
Military Specification	0.28 (2.3)
m. Mold-Seal	0.42 (3.5)
n. Pan-Backing	0.42 (3.5)
o. Prefabricated Architectural Multi-	0.28(2.3)
Component	
p. Prefabricated Architectural One-	0.28(2.3)
Component	
q. Pretreatment Coatings	0.42 (3.5)
r. Repair and Touch Up	0.36 (3.0)
s. Silicone Release	0.42 (3.5)
t. Solar-Absorbent	0.36 (3.0)
u. Vacuum Metalizing	0.42 (3.5)
v. Drum Coating, New, Exterior	0.34 (2.8)
w. Drum Coating, New, Interior	0.42(3.5)
<ul> <li>x. Drum Coating, Reconditioned, Exterior</li> </ul>	0.42(3.5)
y. Drum Coating, Reconditioned, Interior	0.50(4.2)
3. Pleasure Craft Surface Coating	
a. Extreme High-Gloss Topcoat	0.49 (4.1)
b. High Gloss Topcoat	0.42 (3.5)
c. Pretreatment Wash Primers	0.78 (6.5)
d. Finish Primer Surfacer	
	0.42 (3.5)
e. High Build Primer Surfacer	0.34 (2.8)
f. Aluminum Substrate Antifoulant Coating	0.56 (4.7)
g. Other Substrate Antifoulant Coating	0.33 (2.8)
h. All Other Pleasure Craft Surface Coatings	0.42 (3.5)
4. Motor Vehicle Materials	
a. Motor Vehicle Cavity Wax	0.65 (5.4)
b. Motor Vehicle Sealer	0.65 (5.4)
	()

c. Motor Vehicle Deadener	0.65 (5.4)
d. Motor Vehicle Gasket/Gasket Sealing	0.20 (1.7)
Material	
e. Motor Vehicle Underbody Coating	0.65 (5.4)
f. Motor Vehicle Trunk Interior Coating	0.65 (5.4)
g. Motor Vehicle Bedliner	0.20 (1.7)
h. Motor Vehicle Lubricating Wax/Compound	0.70 (5.8)

Note: The VOC content limits for the coating and application types under Table 6 rows 1. a. to 2. y. apply to any coating that does not meet the definitions for the specific coatings listed under Table 6 rows 3. a. to 4. h.

- (b) If the low-VOC coatings that meet the VOC content limits required under par. (a) are not used at an affected facility, the owner or operator shall use add-on control equipment that achieves a minimum overall emission reduction efficiency of 90 percent for VOC.
- (5) APPLICATION METHODS. An owner or operator of an affected facility under this section, except for a facility that uses add-on control equipment as described under sub. (3) (b), shall use one or a combination of the following application methods for the affected coating operations:
  - (a) Electrostatic application.
  - (b) High-volume, low-pressure spray equipment.
  - (c) Flow coating.
  - (d) Roll coating.
  - (e) Dip coating, including electrodeposition.
  - (f) Airless spray.
  - (g) Air-assisted airless spray.
- (h) Other coating application methods that are capable of achieving a transfer efficiency equivalent or better than achieved by high-volume, low-pressure spraying and are approved by the department.

- (6) ADD-ON CONTROL EQUIPMENT REQUIREMENTS. An owner or operator that uses add-on control equipment as described under sub. (4) (b) shall comply with the applicable monitoring, testing, and recordkeeping requirements under ss. NR 439.04 (5) (e), 439.055, and 439.075.
- (7) WORK PRACTICES FOR COATING-RELATED ACTIVITIES. The owner or operator of an affected facility under this section shall do all of the following for coating-related activities:
- (a) Store all VOC-containing coatings, thinners, and coating-related waste materials in closed containers.
- (b) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, and coating-related waste materials are kept closed at all times, except when depositing or removing those materials.
- (c) Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials.
- (d) Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.
- (8) CLEANING MATERIAL WORK PRACTICES. The owner or operator of an affected facility under this section shall do all of the following for cleaning materials:
- (a) Store all VOC-containing cleaning materials and used shop towels in closed containers.
- (b) Ensure that storage containers used for VOC-containing materials are kept closed at all times, except when depositing or removing those materials.
- (c) Convey VOC-containing cleaning materials from one location to another in closed containers or pipes.
  - (d) Minimize spills of VOC-containing cleaning materials.

- (e) Minimize emissions of VOCs during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.
- (9) RECORDKEEPING REQUIREMENTS. (a) An owner or operator subject to the VOC content limitations under sub. (4) (a) shall maintain records as described under s. NR 439.04 (5) (a).
- (b) Records required under this subsection shall be kept for the time period specified under s. NR 439.04 (2).
- (10) COMPLIANCE SCHEDULE AND CERTIFICATION. (a) *Compliance schedule*. The owner or operator of a miscellaneous metal parts and products facility shall comply with the applicable requirements of this section upon the facility becoming subject to this section as provided under sub. (1), except for any of the following:
- 1. The owner or operator of a miscellaneous metal parts and products facility subject to this section that commenced construction before the effective date of this rule [LRB inserts date] shall comply with applicable requirements of this section 180 days after the effective date of this rule [LRB inserts date]. Any facility that was subject to s. NR 422.15 before the effective date of this rule [LRB inserts date] shall continue to comply with the requirements in s. NR 422.15 until the date when the facility is in compliance with the applicable requirements of this section or until 180 days after the effective date of this rule [LRB inserts date], whichever is sooner.
- 2. The owner or operator of a miscellaneous metal parts and products facility that becomes subject to this section due to either the designation or the reclassification of a nonattainment area that occurs after the effective date of this rule [LRB inserts date], shall comply with applicable requirements of this section 180 days after the effective date of the nonattainment designation or reclassification, as indicated by the relevant Federal Register publication.
- (b) *Certification*. No later than 60 days after the compliance deadline specified under par. (a), the owner or operator of a miscellaneous metal parts and products facility subject to this section shall submit to the department written certification that all affected miscellaneous metal

parts and products coating operations are in compliance with the applicable requirements of this section. The owner or operator of a facility subject to s. NR 422.15 before the effective date of this rule [LRB inserts date] that is required to have an operation permit under ch. NR 407 shall submit to the department a permit application or a permit revision or renewal application that meets the requirements of s. NR 407.05 to meet this certification requirement, except that no application shall be required for a source operating under a general operation permit or a registration operation permit issued under s. NR 407.10 or 407.105.

# **SECTION 33.** NR 423.035 (2) (a) 1. is amended to read:

NR 423.035 (2) (a) 1. Operations regulated under s. NR 421.05 (2m), 421.06 (2m), 422.05 (3), 422.06 (3), 422.075 (3), 422.08 (3), 422.083 (3m), 422.09 (6), 422.095 (7), 422.105 (5), 422.115 (5), 422.125 (4m), 422.127 (3m), 422.128 (7), 422.131 (3), 422.14 (4), 422.141 (3), 422.142 (2) (c), 422.143 (3) (c) and (4), 422.144 (4) (b) and (5), 422.145 (2m), 422.15 (9), 422.155 (5), or 423.03.

# **SECTION 34.** NR 423.037 (2) (a) 1. is amended to read:

**NR 423.037 (2)** (a) 1. Operations regulated under s. NR 422.127 (3m), <u>422.128 (7)</u>, or 423.03.

# SECTION 35. NR 425.04 (3) (a) is amended to read:

NR 425.04 (3) (a) This subsection applies only to sources subject to s. NR 422.15 which or 422.151 that, prior to March 1, 1990, applied specialized coatings required by state or federal agencies on products made for their use.

# **SECTION 36.** NR 439.04 (4) (intro.), (a), (b), (c) and (d) are amended to read:

NR 439.04 (4) Any owner or operator of a coating or printing line or operation that is exempt from the emission limitations of s. NR 422.07, 422.10, 422.11, 422.12, or 422.13, under s. NR 422.03, or of a facility whose VOC emissions are below an exemption threshold specified under s. NR 422.03 or below an applicability threshold of any section of ch. NR 422.7 shall

collect and record <u>all of</u> the following information as appropriate to support the exemption or the applicability determination:

- (a) A unique name or identification number for each coating—or, ink, adhesive, adhesive primer, or cleaning solvent, as applied.
- (b) The VOC content of each coating-or, ink, adhesive, adhesive primer, or cleaning solvent, as applied, in units of pounds of VOC per gallon, excluding water and exempt compounds listed under s. NR 400.02 (162) (a).
- (c) The volume of coating or, ink, adhesive, adhesive primer, or cleaning solvent used per day or per month based on the applicability statement specified under each section of ch. NR 422, as applied, in units of gallons, excluding water and exempt compounds listed under s. NR 400.02 (162) (a).
- (d) The total maximum theoretical emissions of VOCs from a facility or the actual VOC emissions from all coating or printing lines, including cleaning operations if necessary before consideration of controls, meeting the same applicability statement at the facility before the application of capture systems and control devices specified under each section of ch. NR 422. The maximum theoretical emissions of VOCs or the actual VOC emissions before consideration of controls shall be shown in the units of VOCs per day, or per month and per 12 consecutive month period, consistent with and depending on the units in the applicability statement specified under each section of ch. NR 422.

**SECTION 37. NR 439.04** (4) (e) to (g) are repealed.

# SECTION 38. NR 439.04 (5) (a) (intro.) is amended to read:

NR 439.04 (5) (a) Any owner or operator of a coating or printing line or operation subject to an emission limitation in-under ss. NR 422.05 to 422.083-422.084, 422.09 to 422.12, 422.127, 422.128, 422.131, 422.132, 422.135, or 422.145 to 422.155 shall collect and record all of the following information for each coating or printing line or operation:

# SECTION 39. NR 439.04 (5) (a) 2. is renumbered (5) (a) 2. (intro.) and amended to read:

**NR 439.04 (5)** (a) 2. The VOC content of each coating or ink, as applied, in <u>any of the</u> following units <u>of pounds</u>, as applicable:

<u>a. Pounds of VOCVOCs</u> per gallon <u>of coating or ink</u>, excluding water <u>and exempt compounds listed under s. NR 400.02 (162) (a)</u>.

# **SECTION 40.** NR 439.04 (5) (a) 2. b. is created to read:

NR 439.04 (5) (a) 2. b. Pounds of VOCs per gallon of coating solids.

# SECTION 41. NR 439.04 (5) (f) (intro.) is amended to read:

NR 439.04 (5) (f) Any owner or operator of a surface coating or printing facility that is subject to one or more emission limitations inunder ss. NR 422.05 to 422.15 422.151, and that is achieving compliance with the applicable emission limitation or limitations by internal offsets as allowed under s. NR 425.05 shall, in addition to the applicable information required under pars.

(a) to (d), collect and record the following information for each day of operation for each coating or ink involved in the internal offset:

# SECTION 42. NR 484.10 Table 5 Rows (9) and (25m) are amended to read:

# NR 484.10

# Table 5 ASTM Standard References

(9)	ASTM D523-89 (1999)	Standard Test Method for Specular Gloss	ANSI A135.5-2004 NR 422.02 (49m) NR 422.02 (26), (41s), and (49m)
(25m)	ASTM D1613-02	Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products	NR 422.02 (67m), 422.084 (2) (c), and 422.151 (2) (b) and (c)

**SECTION 43. EFFECTIVE DATE**. This rule takes 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 44. BOARD ADOPTION.** This rule was approved and adopted with germane modifications by the State of Wisconsin Natural Resources Board on December 8, 2021.

Dated at Madison, Wisconsin	
	STATE OF WISCONSIN
	DEPARTMENT OF NATURAL RESOURCES
	DV
	For Preston D. Cole, Secretary
	Tof Treston D. Cole, Secretary
(SEAL)	