

**NOTICE OF FINAL RULEMAKING  
MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS  
REGULATION III – CONTROL OF AIR CONTAMINANTS  
RULE 336: SURFACE COATING OPERATIONS AND INDUSTRIAL ADHESIVE  
APPLICATION PROCESSES**

The Maricopa County Air Quality Department (MCAQD) revised Rule 336 (Surface Coating Operations and Industrial Adhesive Application Processes). The Control Officer is posting this Notice of Final Rulemaking on the MCAQD website as required by A.R.S. § 49-471.07(G). This notice includes the preamble, as prescribed in A.R.S. § 49-471.05, and the full text of the final rule. This notice also includes a list of all previous notices posted on the Maricopa County Enhanced Regulatory Outreach Program (EROP) website addressing the proposed rule and the concise explanatory statement prescribed in A.R.S. § 49-471.07, subsection B.

**PREAMBLE**

**1. Statutory authority for the rulemaking:**

A.R.S. §§ 49-112, 49-474, 49-479 and 49-480

**2. Name and address of department personnel with whom persons may communicate regarding the rulemaking:**

Name: Greg Verkamp or Kimberly Butler  
Maricopa County Air Quality Department  
Planning and Analysis Division

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Submit

Comments At: <http://maricopa.gov/FormCenter/Regulatory-Outreach-17/Citizen-Comments-94>

**3. Rulemaking process:**

This rulemaking (AQ-2017-008-Rule 336) followed procedures identified in state statutes and the Maricopa County EROP Policy:

County Manager Briefing: December 2017

Stakeholder Workshops: March 8, 2018  
August 22, 2018  
October 24, 2019  
July 16, 2020

Board of Health Meeting to Approve Expedited  
Process Rulemaking: April 23, 2018

Notice of Proposed Rulemaking:	January 27, 2021
Board of Health Meeting to Recommend Approval to the Board of Supervisors:	April 26, 2021
Board of Supervisors Public Hearing:	September 1, 2021

**4. Explanation of the rule, including the control officer's reasons for initiating the rulemaking:**

Rule 336 establishes limits for the emission of Volatile Organic Compounds (VOCs) from surface coating operations and industrial adhesive application processes. Rule 336 applies to VOC-containing coatings and industrial adhesives listed in Tables 336-1 through 336-7 of the rule. The MCAQD revised Rule 336 to address rule deficiencies identified by the U.S. Environmental Protection Agency (EPA) to secure full approval of Rule 336 as a revision to the Arizona State Implementation Plan (SIP).

On May 4, 2016, portions of Maricopa County were designated as a moderate nonattainment area with respect to the 2008 National Ambient Air Quality Standards for Ozone. Section 182(b)(2) of the Clean Air Act requires jurisdictions that are classified as "moderate" or higher nonattainment to implement reasonably available control technology (RACT) for all categories of VOC sources covered by a Control Technique Guideline (CTG) document as well as all other major stationary sources of VOCs that are located within in the nonattainment area. EPA defines RACT as "the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility". The EPA provides guidance on RACT for VOCs through their CTGs, which offer State and local air pollution control authorities information that assists in determining VOC-RACT for air quality rules. In addition, the EPA reviews SIP-approved air quality rules from other air districts with ozone nonattainment areas to assist in determining VOC-RACT for air quality rules.

In November 2016, Rule 336 was revised to implement RACT for sources of VOCs. The revised rule was submitted to the EPA in June of 2017, as part of the SIP Revision for the Maricopa County Air Quality Department Ozone Rules contained in the Arizona SIP. The EPA reviewed Rule 336 and provided the MCAQD with written rule approvability and rule improvement comments for the rule. EPA staff informed MCAQD staff they would be using a conditional approval process to act on Rule 336 and the MCAQD would need to draft a commitment letter outlining revisions to Rule 336 to address the rule approvability comments.

On January 28, 2019, the MCAQD submitted a Letter of Commitment for Conditional Approval of the Maricopa County RACT SIP to the EPA. Later, on December 5, 2019, the MCAQD submitted a supplemental commitment letter to address additional rule approvability comments MCAQD received after the original commitment letter was submitted. Based on the commitment letters, the EPA published a proposed conditional approval of Rule 336 in the Federal Register on January 28, 2020 (Docket ID; EPA-R09-OAR-2019-0423). The proposed conditional approval rulemaking was available for a 30-day comment period, but no comments were received. The proposed conditional approval referenced a Technical Support Document (TSD) which included a thorough review of Rule 336 and MCAQD's commitments. The TSD outlined EPA's seven (7) official rule approvability comments ("rule deficiencies") - which precluded full approval of the rule into

the SIP - as well as 12 rule revision recommendations, which were not the basis for rule disapproval but were recommended for the rulemaking for Rule 336. Revisions addressing both the EPA's identified deficiencies and recommendations were made to the revised Rule 336 (included in this notice). A link to EPA's TSD is located under Section 5 of this notice.

EPA's final conditional approval was published on January 7, 2021. The effective date of the final rule was February 8, 2021. The MCAQD plans to submit the revised rule to the EPA for approval and if the EPA approves the rule, the identified deficiencies will be cured, and the rule will be approved as part of the Arizona SIP.

Details about the EPA's identified deficiencies and the MCAQD's remedies are described below, followed by the EPA rule recommendations and the MCAQD's revisions to address the recommendations.

Deficiency 1:

Section 300, Standards, Table 336-2 contains VOC content limits for the categories of End Sealing Compound: Food or Beverage, End Sealing Compound: Non Food, Sheet Basecoat (Interior and Exterior) and Overvarnish, Two Piece Can Interior Body Spray, Three Piece Can Interior Body Spray, Two Piece Can Exterior Base Coat Overvarnish, and Two Piece Can Exterior End (Spray or Roll Coat) which comply with the 1977 CTG, "EPA450/2-77-008, Control of Volatile Organic Emissions from Existing Stationary Sources- Volume II: Surface Coating of Cans, Coils, Paper, Fabrics Automobiles and Light Duty Trucks," May 1977, but are generally significantly higher than the same limits in currently SIP-approved rules such as SCAQMD Rule 1125, Sacramento AQMD Rule 452, BAAQMD Rule 8-11, and SJVUAPCD Rule 4604. Because the lower limits have been achieved in other areas for some time, the limits in Rule 336 do not demonstrate current RACT. The MCAQD must lower the VOC limits for these categories.

Remedy 1:

The MCAQD revised Table 336-2 to lower the VOC limits for the following can coating materials: end sealing compound, sheet basecoat (interior and exterior) and overvarnish, two-piece can interior body spray, three-piece can interior body spray, two-piece can exterior base coat and overvarnish, and two-piece can exterior end spray or roll coat. The lower emission limits are consistent with current RACT, based on a comparison of RACT rules in other nonattainment areas.

Deficiency 2:

Section 103.2 exempts Extreme Performance Coatings from the VOC limits when used on:

- a) internal combustion engines components that are normally above 250°F during use or
- b) items that are used at temperatures above 250°F that are included under various NAICS codes for telecommunications equipment and are electronic products in space vehicles and/or are communications equipment.

The 2008 Miscellaneous Metal and Plastic Parts (MMPP), 2007 Metal Furniture, and 2007 Large Appliance CTGs do not exempt Extreme Performance Coatings. In addition, Rule 336, Tables 336-1, 336-3, 336-5 contain the appropriate VOC content limits for this category and are consistent with the CTGs. The MCAQD must remove the exemption or provide justification for the Extreme Performance Coating exemptions.

Remedy 2:

The MCAQD removed the exemption for extreme performance coatings from Rule 336.

Deficiency 3:

Section 103.5.e exempts Tactical Military Equipment coatings that are in a District-approved permit based on a demonstration that no compliant substitute exists.

The rule does not define "Tactical Military Equipment" and the 2008 MMPP CTG does not include this exemption. Evaluate deleting this exemption if Tactical Military-Equipment Coatings can fall under other CTG categories which include performance standards for "extreme performance" or "military specification" coatings.

Remedy 3:

The MCAQD removed the exemption for tactical military equipment coatings from Rule 336.

Deficiency 4:

Rule 336 is missing the VOC limits and categories for "Motor Vehicle Materials" as is found in Table 6 Motor Vehicle Materials VOC Content Limits of the MMPP CTG. Rule 336 Table 336-4 "Coating Limits for Business Machines" is missing the VOC limits and categories for Automotive/Transportation Coatings as is found in CTG Table 4 for "Automotive/Transportation and Business Machine Plastic Parts VOC Content Limits." The missing categories also do not appear in Maricopa Rule 345 Vehicle and Mobile Equipment Coating. The MCAQD must add these CTG categories and VOC limits to the rule, or if appropriate, consider adopting a negative declaration for the entire CTG category table.

Remedy 4:

To determine if any emitting facilities in these coating categories exist in Maricopa County, the MCAQD conducted file reviews for each facility that is permitted to conduct surface coating operations in Maricopa County. During this evaluation, the MCAQD reviewed a variety of documents, including the permit, the technical support document for the permit, emissions inventory reports, inspection reports, and source records. When necessary, the MCAQD also conducted web searches and made direct contact with Permittees to determine the scope of permitted surface coating operations in Maricopa County.

In accordance with Section 182(b)(2) of the Clean Air Act, the MCAQD will submit negative declarations to the EPA certifying that there are no emitting facilities in Maricopa County for the following coating categories identified in the 2008 Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings:

- Business Machine Plastic Part Coatings
- Automotive/Transportation Plastic Part Coatings
- Motor Vehicle Materials

Deficiency 5:

Section 300, Standards, Table 336-1 contains VOC limits for the category "Other Metal Parts and Products: Includes Non-Adhesive Coating, Adhesive, Adhesive Primer, Beaded Sealant, and Caulking" which does not comply with the 2008 CTG, "EPA-453/R-08-003,

Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings” (MMPP) September 2008. Because the limits for General One Component and General Multi Component Coatings are lower in the CTG, the limits in Rule 336 do not meet the presumptive RACT standard established in the CTG. The County must either lower the VOC limits in this category, or provide an analysis demonstrating that its limits represent RACT.

Remedy 5:

The MCAQD removed adhesives and adhesive primers from the "Other Metal Parts and Products" coating category in Table 336-1 (VOC Limits for Miscellaneous Metal Part and Product Coatings). The MCAQD also lowered the VOC limit for the "Other Metal Parts and Products" coating category to 340 grams VOC per liter (g/L) for air dried coatings and 280 g/L for baked coatings.

Deficiency 6:

Section 300, Standards Table 336-3 contains VOC limits for “Flexible Plastic Parts and Products” as well as “Plastic Parts and Products That Are Not Defined as Flexible.” These categories are not in the 2008 MMPP CTG and contain higher VOC limits than some of the existing categories in the CTG. The County must remove these VOC categories from the rule or demonstrate why the “Flexible Plastic Parts and Products” and “Plastic Parts and Products That Are Not Defined as Flexible” VOC limits meet current RACT.

Remedy 6:

The MCAQD removed the following coating categories from Table 336-3 (VOC Limits for Miscellaneous Plastic Part and Product Coatings):

- Flexible Plastic Parts and Products (Basecoat, Clearcoat, Color Topcoat, and Primer); and
- Plastic Parts and Products that are not Defined as Flexible.

Deficiency 7:

The County submitted a negative declaration for the industrial adhesive category, which is covered by a CTG. However, a facility under the County’s jurisdiction and in the Phoenix-Mesa ozone nonattainment area is using an adhesive covered by the CTG. Therefore, the CTG must be fully addressed in Rule 336.

Remedy 7:

The MCAQD incorporated administrative mechanisms and emission limits that are consistent with RACT emissions limits established in the CTG for Miscellaneous Industrial Adhesives and incorporated in other nonattainment areas.

In addition to remediating these 7 EPA identified deficiencies, the MCAQD also addressed the 12 EPA rule recommendations as described below:

Recommendation 1:

Table 336-2 limits Coil Coatings to 310 g/L. Please consider reducing this limit to 200 g/L consistent with other SIP rules. See Bay Area AQMD Regulation 8, Rule 11 and South Coast AQMD Rule 1125. Alternatively, consider deleting this category since Maricopa County's RACT SIP contains a negative declaration for Coil Coatings.

Revision 1:

The MCAQD revised Table 336-2 to lower the VOC limits for coil coatings to 200 g/L (1.7 lb/gal).

Recommendation 2:

Section 204 Air-Dried Coatings (dried by the use of air or forced warm air at temperatures up to and including 200°F (93.3°C) differs from the MMPP CTG's Appendix H definition of Air-Dried Coating which states the coating is cured at a temperature below 194°F (90°C). Please revise the definition to be consistent with the CTG definition.

Revision 2:

The MCAQD revised the definition of Air-Dried Coatings to reflect a curing temperature of below 194°F (90°C).

Recommendation 3:

Section 207 Baked Coatings (dried or cured in an oven in which the oven temperature exceeds 200°F (93.3°C) differs from the MMPP CTG's Appendix H definition of Baked Coating which states the coating is cured at a temperature at or above 194°F (90°C). Please revise the definition to be consistent with the CTG definition.

Revision 3:

The MCAQD revised the definition of Baked Coatings to reflect a curing temperature at or above 194°F (90°C).

Recommendation 4:

Section 227 Extreme High-Gloss Coating contains a typographical error. Please correct the reference to test method ASTDM D-523 by removing "D" to ASTM D523. Also, the 1999 version (D523-89 (1999)) has been approved for use so please consider revising the rule to include the 1999 version.

Revision 4:

The MCAQD revised the definition of Extreme High-Gloss Coating to correct the typographical error and updated the ASTM reference to reflect the most recent version from 1999.

Recommendation 5:

Section 228 Extreme Performance Coatings - consider expanding the definition to follow the MMPP CTG Appendix H recommended definition (e.g., chronic exposure to corrosive, caustic or acidic agents, repeated heavy abrasion etc.).

Revision 5:

The MCAQD revised the definition of Extreme Performance Coating to reflect the CTG definition, including adding language on chronic exposure to corrosive, caustic or acidic agents, and repeated exposure to high temperatures and heavy abrasion.

Recommendation 6:

Section 501.2.b Recordkeeping Please do not delete the word "coating" in the following sentence: "Shall have the written value of the VOC coating content in one of the following forms."

Revision 6:

The MCAQD confirmed with the EPA that this recommendation was made in error. The MCAQD and EPA determined that the correct language should be "VOC content" as indicated in the attached revised rule.

Recommendation 7:

Section 503.1.a.(1), 503.1.a.(2) and 503.2.f Compliance Determination: Please update BAAQMD Method 31 (April 15, 1992) to May 18, 2005. The May 18, 2005 version is approved for use in SIP rules.

Revision 7:

The MCAQD deleted BAAQMD Method 31 because compliance with this rule is based on VOC Regulatory (excluding water and exempt compounds) and BAAQMD Method 31 does not exclude water and may or may not exclude exempt chlorinated compounds. Therefore, this method is not appropriate for Rule 336. MCAQD replaced any references to BAAQMD Method 31 in Rule 336 with other, more appropriate test methods, such as EPA Method 24 in Section 503.1.a.(1), SCAQMD Method 313-91 in Section 503.1.a.(2), and SCAQMD Method 304-91 in Section 503.2.f.

Recommendation 8:

Section 503.1.a.(2)(b) states for multi-component, polymerizing coatings, Method 24 shall be modified to eliminate the post-mixing dilution-step. We recommend deleting the language to modify EPA Method 24. Method 24 section 11.2 now provides instructions for multi-component coatings. Method 24 shall be used along with ASTM D2369-10(2015)e1 for multi-component, polymerizing coatings.

Revision 8:

The MCAQD deleted the language to modify EPA Method 24.

Recommendation 9:

Section 503.1.b refers to EPA Method 25 and its submethod. The appropriate methods should be listed since some submethods such as Method 25C, Landfill Gases, are not appropriate for coatings. See 503.3.a which also needs correcting. Alternatively, consider changing the "and" to "or" and adding "as appropriate." (e.g., EPA Method 25 or its submethods as appropriate.). Section 503.2, incorporation by reference is correct as written and does not need to be changed.

Revision 9:

The MCAQD listed the specific EPA submethods which are applicable to this rule (submethods 25a and 25b) in all sections that refer to EPA Method 25.

Recommendation 10:

503.1.c Capture efficiency. Please modify to include the guidance document for capture efficiency: e.g., The capture efficiency of an emission collection control system shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR 51, Appendix M, Methods 204-204F, as applicable. See also 503.3.b. The listed methods: EPA Methods 2, 2a, 2c, and 2d. Please change the "and" to "or". Ideally, the

rule should include an equation for capture and control efficiency. E.g., San Joaquin Rule 4604 Can and Coil Coating Operations Section 6.7.2.3.

Revision 10:

The MCAQD revised this section to expand and clarify the methods to determine capture efficiency by referencing EPA Methods 204-204f, EPA’s “Guidelines for Determining Capture Efficiency”, and an option to use an equation based on mass balance in combination with ventilation/draft rate determinations based on EPA Methods 2, 2a, 2c, or 2d.

Recommendation 11:

503.2.b EPA Method 18. Please delete "and its submethods." Method 18 has no submethods. See also 503.3.a.

Revision 11:

The MCAQD removed “and its submethods” where Method 18 is referenced.

Recommendation 12:

503.3.c The listed methods: EPA Methods 2, 2a, 2c, and 2d. The "and" should be "or".

Revision 12:

The MCAQD removed Section 503.3c and replaced “and” with “or” when referencing these methods in Section 503.1c.

On May 1, 2020, after the EPA had published the proposed conditional approval of Rule 336 in the Federal Register, the EPA advised MCAQD to revise the VOC limits for three pleasure craft coating categories (“antifoulant coating- non-aluminum substrate,” “extreme high gloss topcoat,” and “finisher primer/surfacer”) to match the ones listed in the 2008 Miscellaneous Metal and Plastic Parts Coating CTG. During the 2016 rulemaking for Rule 336, those three coating categories were not matched to CTG due to stakeholder concerns. At that time, the MCAQD reviewed the concerns and determined that higher VOC limits for the three coatings constituted RACT for VOC operations in the Phoenix ozone nonattainment area. The EPA recently determined the CTG limits to be RACT since there are now coatings available that meet the CTG limits. The MCAQD revised the VOC limits for these three coating categories to match the CTG, as follows:

**Table ~~336-7~~ 336-6: Coating VOC Limits for Pleasure Craft Coatings**

Coating Category	g VOC/l	lbs VOC/gal
<del>Other Substrate</del> Antifoulant Coating – Non-Aluminum Substrate	400 <u>330</u>	3.4 <u>2.8</u>
Extreme High Gloss Topcoat	600 <u>490</u>	5.2 <u>4.1</u>
Finish Primer/Surfacer	600 <u>420</u>	5.2 <u>3.5</u>

In addition, the MCAQD revised the definition for Extreme High-Gloss Coating to better differentiate the difference between those used for general coating purposes (which have a reflectance of 75% or more) with those used for pleasure craft coating purposes (which have a reflectance of 95% or more). The MCAQD revised the definition for clarity, as follows:

**EXTREME HIGH-GLOSS COATING:** A coating ~~when tested by the ASTM D-523 adopted in 1980~~ that shows reflectance of 75 or more (95 or more for pleasure craft topcoats) on a 60° meter as determined by ASTM D523 (1999).

Additional revisions were made to address stakeholder and staff comments, which can be discerned in the “strikeout and underline” version of the rule included in this notice and described in all Stakeholder Workshop notices and workshop slides/presentations that are posted on the EROP website.

**5. Studies relied on in the control officer's evaluation of or justification for the rule and where the public may obtain or review the studies, all data underlying the studies, any analysis of the studies and other supporting material.**

U.S. Environmental Protection Agency Region IX Air Division (2019). Technical Support Document for EPA’s Rulemaking for the Arizona State Implementation Plan Regarding Rule 336, “Surface Coating Operations”,  
<https://www.regulations.gov/document?D=EPA-R09-OAR-2019-0423-0004>

U.S. Environmental Protection Agency, “Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks,” May, 1977,  
[https://www3.epa.gov/airquality/ctg\\_act/197705\\_voc\\_epa450\\_2-77-008\\_surface\\_coatings\(v2\).pdf](https://www3.epa.gov/airquality/ctg_act/197705_voc_epa450_2-77-008_surface_coatings(v2).pdf)

U.S. Environmental Protection Agency, “Control of Volatile Organic Emissions from Existing Stationary Sources – Volume V: Surface Coating of Large Appliances,” December, 1977,  
[https://www3.epa.gov/airquality/ctg\\_act/197712\\_voc\\_epa450\\_2-77-034\\_surface\\_coatings\(v5\).pdf](https://www3.epa.gov/airquality/ctg_act/197712_voc_epa450_2-77-034_surface_coatings(v5).pdf)

U.S. Environmental Protection Agency, “Control of Volatile Organic Emissions from Existing Stationary Sources – Volume III: Surface Coating of Metal Furniture,” December, 1977,  
[https://www3.epa.gov/airquality/ctg\\_act/197712\\_voc\\_epa450\\_2-77-032\\_surface\\_coatings\(v3\).pdf](https://www3.epa.gov/airquality/ctg_act/197712_voc_epa450_2-77-032_surface_coatings(v3).pdf)

U.S. Environmental Protection Agency, “Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products,” June, 1978,  
[https://www3.epa.gov/airquality/ctg\\_act/197806\\_voc\\_epa450\\_2-78-015\\_surface\\_coatings\(v6\).pdf](https://www3.epa.gov/airquality/ctg_act/197806_voc_epa450_2-78-015_surface_coatings(v6).pdf)

U.S. Environmental Protection Agency, “Alternative Control Techniques Document – Surface Coating of Automotive/Transportation and Business Machine Plastic Parts,” February, 1994, [https://www3.epa.gov/airquality/ctg\\_act/199402\\_voc\\_epa453\\_r-94-017\\_Coating\\_Automotive\\_Plastic\\_Part.pdf](https://www3.epa.gov/airquality/ctg_act/199402_voc_epa453_r-94-017_Coating_Automotive_Plastic_Part.pdf)

U.S. Environmental Protection Agency, “Control Techniques Guidelines for Industrial Cleaning Solvents,” September, 2006,  
[https://www3.epa.gov/airquality/ctg\\_act/200609\\_voc\\_epa453\\_r-06-001\\_ind\\_cleaning\\_solvents.pdf](https://www3.epa.gov/airquality/ctg_act/200609_voc_epa453_r-06-001_ind_cleaning_solvents.pdf)

U.S. Environmental Protection Agency, “Control Techniques Guidelines for Paper, Film and Foil Coatings,” September, 2007,  
[https://www3.epa.gov/airquality/ctg\\_act/200709\\_voc\\_epa453\\_r-07-003\\_paper\\_film\\_coating.pdf](https://www3.epa.gov/airquality/ctg_act/200709_voc_epa453_r-07-003_paper_film_coating.pdf).

U.S. Environmental Protection Agency, “Control Techniques Guidelines for Large Appliance Coatings,” September, 2007,  
[https://www3.epa.gov/airquality/ctg\\_act/200709\\_voc\\_epa453\\_r-07-004\\_lg\\_appliance\\_coating.pdf](https://www3.epa.gov/airquality/ctg_act/200709_voc_epa453_r-07-004_lg_appliance_coating.pdf).

U.S. Environmental Protection Agency, “Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings,” September, 2008,  
[https://www3.epa.gov/airquality/ctg\\_act/200809\\_voc\\_epa453\\_r-08-003\\_misc\\_metal\\_plasticparts\\_coating.pdf](https://www3.epa.gov/airquality/ctg_act/200809_voc_epa453_r-08-003_misc_metal_plasticparts_coating.pdf).

U.S. Environmental Protection Agency, “Control Techniques Guidelines for Miscellaneous Industrial Adhesives,” September, 2008,  
[https://www3.epa.gov/airquality/ctg\\_act/200809\\_voc\\_epa453\\_r-08-005\\_miscellaneous\\_industrial\\_adhesives.pdf](https://www3.epa.gov/airquality/ctg_act/200809_voc_epa453_r-08-005_miscellaneous_industrial_adhesives.pdf).

**6. An economic, small business and consumer impact statement:**

The following discussion addresses each of the elements required for an economic, small business and consumer impact statement, as prescribed by A.R.S. §§ 41-1055, subsections A, B and C, and 41-1035:

**An identification of the rulemaking, including all of the following:**

This rulemaking revised Rule 336.

**(a) The conduct and its frequency of occurrence that the rule is designed to change.**

The MCAQD revised Rule 336 to remedy deficiencies identified by the EPA. This rulemaking is required to secure approval of Rule 336 into the Arizona SIP. The revisions are explained in more detail in Item #4 of this notice.

**(b) The harm resulting from the conduct the rule is designed to change and the likelihood it will continue to occur if the rule is not changed.**

The MCAQD revised Rule 336 to remedy deficiencies identified by the EPA. This rulemaking is required to secure approval of Rule 336 into the Arizona SIP and avoid sanctions and imposition of a Federal Implementation Plan (FIP) under the Clean Air Act.

**(c) The estimated change in frequency of the targeted conduct expected from the rule change.**

The MCAQD revised Rule 336 to remedy deficiencies identified by the EPA. This rulemaking is required to secure approval of Rule 336 into the Arizona SIP. As with other rules, the MCAQD will use education, outreach, and other compliance assurance tools to increase the number of people in compliance with the revised rule. The MCAQD strives to achieve the highest possible compliance rates.

**A brief summary of the information included in the economic, small business and consumer impact statement.**

The economic, small business and consumer impact statement addresses each of the elements required for an economic, small business and consumer impact statement, as prescribed by A.R.S. §§ 41-1055, subsections A, B and C, and 41-1035.

**Name and address of agency employees who may be contacted to submit or request additional data on the information included in the economic, small business and consumer impact statement.**

Name: Greg Verkamp or Kimberly Butler  
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Planning and Analysis Division

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Submit

Comments At: <http://maricopa.gov/FormCenter/Regulatory-Outreach-17/Citizen-Comments-94>

**An identification of the persons who will be directly affected by, bear the costs of or directly benefit from the rulemaking.**

This rulemaking will directly affect facilities in Maricopa County that use VOC-containing coatings and industrial adhesives listed in Tables 336-1 through 336-7 of the revised rule included in this notice that are not more specifically regulated by another source-specific rule within Maricopa County Rules 300 to 359 of Regulation III. Partial exemptions apply to certain materials, coatings and application methods.

**A cost benefit analysis of the following:**

**(a) The probable costs and benefits to the implementing agency and other agencies directly affected by the implementation and enforcement of the rulemaking.**

This rulemaking should not impose any new costs on the MCAQD or on any other agencies affected by the rulemaking.

**(b) The probable costs and benefits to a political subdivision of this state directly affected by the implementation and enforcement of the rulemaking.**

This rulemaking should not impose any new costs on political subdivisions of this state affected by the rulemaking.

**(c) The probable costs and benefits to businesses directly affected by the rulemaking, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the rulemaking.**

The MCAQD revised Rule 336 to remedy deficiencies identified by the EPA. This rulemaking is required to secure approval of Rule 336 into the Arizona SIP for RACT and avoid sanctions and imposition of a FIP under the Clean Air Act.

Some businesses may need a permit or may need to revise their permit as a result of revisions to the applicability of the rule and to some of the VOC limits in the rule. If a business needs a permit, the business will incur a permit application and processing fee. If a business needs to revise their permit, the business will not incur a fee, because the MCAQD will re-open their permit for cause.

For businesses using coatings or adhesives which fall under a category of coating or adhesive where VOC limits decreased or were newly established, compliance with the revised Rule 336 may involve some additional costs related to purchasing Rule 336-compliant coatings or adhesives. For businesses that are already using coatings or adhesives materials which comply with these new limits, there will be no additional costs.

**A general description of the probable impact on private and public employment in businesses, agencies and political subdivisions of this state directly affected by the rulemaking.**

This rulemaking should have no impact on private or public employment in businesses, agencies, and political subdivisions of this state.

**A statement of the probable impact of the rulemaking on small businesses. The statement shall include:**

**(a) An identification of the small businesses subject to the rulemaking.**

Small businesses subject to this rulemaking are those facilities in Maricopa County that use VOC-containing coatings and industrial adhesives listed in Tables 336-1 through 336-7 of the revised rule included in this notice that are not more specifically regulated by another source specific rule within Maricopa County Rules 300 to 359 of Regulation III.

**(b) The administrative and other costs required for compliance with the rulemaking.**

Some small businesses may need a permit or may need to revise their permit as a result of revisions to the applicability of the rule and to some of the VOC limits in the rule. If a business needs a permit, the business will incur a permit application and processing fee. If a business needs to revise their permit, the business will not incur a fee, because the MCAQD will re-open their permit for cause.

For small businesses using coatings or adhesives which fall under a category of coating or adhesive where VOC limits decreased or were newly established, compliance with the revised Rule 336 may involve some additional costs related to purchasing Rule 336-compliant coatings or adhesives. For small businesses that are already using coatings or adhesives materials which comply with these new limits, there would be no additional costs.

**(c) A description of the methods that the agency may use to reduce the impact on small businesses.**

**i. Establish less stringent compliance or reporting requirements in the rule for small businesses.**

This rulemaking does not impose any significant new compliance requirements on small businesses and does not establish any significant new reporting requirements for small businesses.

**ii. Establish less stringent schedules or deadlines in the rule for compliance or reporting requirements for small businesses.**

This rulemaking does not impose any significant new compliance requirements on small businesses and does not establish any significant new reporting requirements for small businesses.

**iii. Consolidate or simplify the rule's compliance or reporting requirements for small businesses.**

This rulemaking does not impose any significant new compliance requirements on small businesses and does not establish any significant new reporting requirements for small businesses.

**iv. Establish performance standards for small businesses to replace design or operational standards in the rule.**

This rulemaking is unlikely to impose any new design or operational requirements on small businesses. Any design or operational changes that will result from this rulemaking will be minimal, such as complying with operational requirements for industrial adhesives in addition to those already required for surface coatings.

**v. Exempt small businesses from any or all requirements of the rule.**

This rulemaking contains some partial and full exemptions as outlined in Sections 103 and 104 of the revised rule.

**(d) The probable cost and benefit to private persons and consumers who are directly affected by the rulemaking.**

This rulemaking should not result in any significant costs for private persons and consumers.

**A statement of the probable effect on state revenues.**

The rulemaking will not impose increased monetary or regulatory costs on other state agencies, political subdivisions of this state, persons, or individuals so regulated. Without costs to pass through to customers, there is no projected change in consumer purchase patterns and, thus, no impact on state revenues from sales taxes.

**A description of any less intrusive or less costly alternative methods of achieving the purpose of the rulemaking, including the monetizing of the costs and benefits for each option and providing the rationale for not using nonselected alternatives.**

The purpose of this rulemaking was to revise Rule 336 to remedy deficiencies identified by the EPA. This rulemaking is required to secure approval of Rule 336 into the State Implementation Plan (SIP) for RACT and avoid sanctions and imposition of a Federal Implementation Plan (FIP) under the Clean Air Act.

**A description of any data on which a rule is based with a detailed explanation of how the data was obtained and why the data is acceptable data.**

Not applicable.

**7. The effective date of the rule:**

The effective date of this rulemaking was September 1, 2021.

**8. Such other matters as are prescribed by statute and that are applicable to the county or to any specific rule or class of rules:**

Under A.R.S. § 49-479(C), a county may not adopt a rule or ordinance that is more stringent than the rules adopted by the Director of the Arizona Department of Environmental Quality (ADEQ) for similar sources unless it demonstrates compliance with the applicable requirements of A.R.S. §49-112.

§ 49-112 County regulation; standards

§ 49-112(A)

When authorized by law, a county may adopt a rule, ordinance or regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all of the following requirements are met:

1. The rule, ordinance or regulation is necessary to address a peculiar local condition.
2. There is credible evidence that the rule, ordinance or regulation is either;
  - (a) Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible.
  - (b) Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance or regulation is equivalent to federal statutes or regulation.
3. Any fee or tax adopted under the rule, ordinance or regulation does not exceed the reasonable costs of the county to issue and administer the permit or plan approval program.

§ 49-112(B)

When authorized by law, a county may adopt rules, ordinances or regulations in lieu of a state program that are as stringent as a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if the county demonstrates that the cost of obtaining permits or other approvals from the county will approximately equal or be less than the fee or cost of obtaining similar permits or approvals under this title or any rule adopted pursuant to this title. If the state has not adopted a fee or tax for similar permits or approvals, the county may adopt a fee when authorized by law in the rule, ordinance or regulation that does not exceed the reasonable costs of the county to issue and administer that permit or plan approval program.

The MCAQD is in compliance with A.R.S. §§ 49-112(A) and (B). Rule 336 meets A.R.S. § 49-112(A)(1) by demonstrating that the rule is necessary to address a peculiar local condition, in that Maricopa County fails to meet the 8-hour NAAQS for ozone. Rule 336 meets the requirements of A.R.S. § 49-112(A)(2)(b), in that Maricopa County is required by federal law to revise existing rules to address RACT for the Surface Coating industry. As there is no new fee or tax associated with this rulemaking, the MCAQD also affirms that Rule 336 meets the requirements of A.R.S. § 49-112 (A)(3) and A.R.S § 49-112 (B).

**9. List of all previous notices posted to the Maricopa County EROP website addressing the rule and a concise explanatory statement, as prescribed by A.R.S. § 49-471.07, subsection B:**

**(a) List of all previous notices posted to the Maricopa County EROP website addressing the rule:**

<u>Notice</u>	<u>Date of Posting</u>
Briefing Notification to County Manager:	January 26, 2018
Notice of Stakeholder Workshops:	February 21, 2018 August 3, 2018 October 9, 2019 June 29, 2020
Notice of Board of Health Meeting to Approve Expedited Rulemaking:	April 6, 2018
Notice of Proposed Rulemaking:	January 27, 2021
Notice of Board of Health Meeting to Make Recommendations to the Board of Supervisors:	April 12, 2021
Notice of Public Hearing:	July 14, 2021

**(b) The following discussion addresses each of the elements required for a concise explanatory statement, as prescribed by A.R.S. § 49-471.07, subsection B:**

**i. A description of any change between the proposed rule, the final rule or notice of final supplemental rule.**

The following changes to Rule 336 were made after the Notice of Proposed Rulemaking was published on January 27, 2021:

1. The language in Rule 336 was revised to clarify that the application of all industrial adhesives and industrial adhesive primers must comply with the provisions in Section 302.1 and that alternative methods for all applications of industrial adhesives and industrial adhesive primers must comply with Section 302.2b.

**ii. A summary of the comments and arguments for and against the notice and the county's response to the comments and arguments.**

The following discussion evaluates the arguments for and against the rule and includes responses to comments received on the proposed rule or the preamble in the Notice of Proposed Rulemaking. The MCAQD received written feedback from three stakeholders. One stakeholder expressed support and two stakeholders expressed "other" to the proposed changes and also provided written comments. After the public hearing was set on July 14, 2021, the MCAQD received additional comments from one of the stakeholders who had previously submitted comments. Although the comments were the same as the initial comments that were submitted, the stakeholder changed the comment type from "other" to "express opposition".

**Comment #1:**

[Our organization] submits the following comments on MCAQD's proposed amendments to Rule 336 (Surface Coating Operations). [Our organization] is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. Notably, [our organization] represents a variety of marine coatings manufacturers and active ingredient suppliers who sell pleasure craft coating products in Maricopa County, Arizona. Above all, [our organization] and its member companies are committed to safeguarding the environment by providing only top-quality marine coatings to recreational vessel owners.

Since 2010, [our organization] has worked diligently with MCAQD, the U.S. Environmental Protection Agency (EPA), and other industry stakeholders to come up with a solution on how the county should move forward with handling the VOC limits for the three pleasure craft coating categories. [Our organization] agrees that MCAQD should lower the following pleasure craft coating VOC limits to comply with the limits in EPA's CTG:

- Extreme High Gloss Topcoat: 490 g VOC/l or 4.1 lbs VOC/gal
- Finish Primer/Surfacer: 420 g VOC/l or 3.5 lbs VOC/gal

However, we urge MCAQD to consider retaining the VOC limit for the following pleasure craft coating category:

- Antifoulant Coating – Non-Aluminum Substrate: 400 g VOC/l or 3.4 lbs VOC/gal

[Our organization] members require a reasonable amount of lead time to adjust formulations and supply chain processes in order to ensure compliance with amended VOC limits, labeling, and reporting requirements. [Our organization] believes that industry needs additional time to comply with the proposed lowered limit for Antifoulant Coating – Non-Aluminum Substrate. Furthermore, at the proposed EPA CTG level (330 g VOC/l), consumers will not have a wide range of options for these types of products and the market will be limited. It takes many years to develop, test, and register a new antifouling coating. A limit of 400 g/L will ensure that industry can provide a full range of products for differing water types, application temperatures, and fouling conditions.

In addition, our member believes that the limit for All Other Pleasure Craft Coatings for Metal or Plastic category should be increased to 490 g VOC/l or 4.1 lbs VOC/gal to align with the Extreme High Gloss Topcoat category. These types of coatings are applied to small parts of pleasure crafts and would benefit from a higher VOC limit to be efficient.

[Our organization] looks forward to working with MCAQD and other interested stakeholders on Rule 336 and hopes that MCAQD will eventually make an informed decision that is in the best interests of its residents.

Thank you for your consideration of our concerns and please let us know if you have any questions.

**Response #1:**

Thank you for providing comments on the draft revisions to Rule 336. Below is a response to each concern provided in your comments.

The MCAQD evaluated your comment about retaining the current pleasure craft coating limit of 400 g VOC/l for Antifoulant Coating (Non-Aluminum Substrate) and determined this VOC limit could not be retained. Rule 336 was amended to ensure the rule meets the reasonably available control technology (RACT) requirements of section 182(b) of the Clean Air Act for ozone nonattainment areas classified as Moderate. The MCAQD determined the 330 g VOC/l emission limit for Antifoulant Coating (Non-Aluminum Substrate) in the revised rule meets RACT. This emission limit is consistent with limits in EPA's Control Techniques Guidelines (CTG) for Miscellaneous Metal and Plastic Parts Coatings and emission limits in the CTGs are generally understood to be equivalent to RACT emission limits. In addition, the 330 g VOC/l emission limit matches emission limits in several current RACT-approved rules within EPA Region 9. The MCAQD must ensure Rule 336 meets RACT requirements so the rule can be approved into the Arizona State Implementation Plan (SIP). Failing to lower the current limit for Antifoulant Coating (Non-Aluminum Substrate) could jeopardize this approval and could ultimately lead to federal highway and offset sanctions for Maricopa County further down the road. Finally, the EPA recommended the MCAQD lower this limit last year (2020) and we moved forward with this lower limit in order to comply with their recommendation.

The MCAQD notified stakeholders of these lower emission limits during a stakeholder workshop in July 2020 so there was time for industry to come into compliance by using up coatings that did not comply with the new limits and slowly beginning to purchase new coatings that do comply with the new limits.

The MCAQD evaluated your comment about increasing the VOC limit of 420 g VOC/l for All Other Pleasure Craft Surface Coatings for Metal or Plastic to 490 g VOC/l and determined this limit could not be increased. This limit is consistent with the limits in the EPA CTG for Miscellaneous Metal and Plastic Parts Coatings. As mentioned above, Rule 336 was amended to ensure the rule meets RACT requirements and emission limits in the CTGs are generally understood to be equivalent to RACT emission limits. In addition, the EPA published the final conditional approval of the 2016 version of Rule 336 on January 7, 2021 so it is now part of the Arizona SIP. Once a rule is approved as part of the SIP it is very difficult to relax any requirement in a rule as it may be viewed as backsliding. Backsliding may jeopardize approval of the rule which may lead, as mentioned earlier, to federal highway and offset sanctions for Maricopa County further down the road.

Also, the MCAQD reviewed all violations of Rule 336 issued through our Compliance division since the 420 g VOC/l limit was adopted in 2016 and did not find any enforcement issues for this particular coating category in Maricopa County. Our Business Assistance Office is available to assist the regulated community with any compliance-related concerns by offering education, training, and courtesy site visits as needed.

**Comment #2:**

Our materials are typically well below 50 grams/liter in VOC content which is minimal compared to the proposed limits. We respectfully request that UV/EB/LED materials be exempted from the rule requirements. An exemption

would be an incentive for businesses to voluntarily choose UV/EB/LED technology resulting in additional emission reductions for Maricopa County.

Recordkeeping requirements are burdensome on businesses and in the case of UV/EB/LED operations, are not crucial because the materials are well below the rule limits. Exempting energy curable materials from overly prescriptive recordkeeping requirements will alleviate regulatory burdens on the Maricopa County business community and benefit air quality.

**Response #2:**

Revised Rule 336 includes an exemption for coating products that have a VOC content, minus exempt compounds, of less than 0.15lb VOC/gal (18g/L). Also, there is no permitting requirement in Maricopa County for facilities that emit any regulated air pollutant in an amount less than the permitting thresholds listed in Rule 200, Section 303.1 (for VOCs, the permitting threshold is 0.5 tons per year). These exemptions are in place to encourage businesses to adopt products and practices which limit impacts on air quality.

In addition, the 2016 version of Rule 336 was conditionally approved as part of the Arizona State Implementation Plan (SIP) earlier this year. Any relaxation of the provisions in the rule could be considered backsliding, which could jeopardize the full approval of the Rule 336 into the SIP and potentially lead to federal highway and offset sanctions for Maricopa County further down the road.

**Comment #3:**

We would very much appreciate the inclusion of a definition for energy curable materials in the rule. We propose a definition like the one in SCAQMD rules:

ENERGY CURABLE MATERIALS are single component reactive products that cure upon exposure to visible-light, ultraviolet light, or to an electron beam.

**Response #3:**

Thank you for providing the MCAQD with a good working definition for energy curable materials. However, a definition is not necessary since the MCAQD did not include any additional provisions regarding these materials into the revised Rule 336.

**Comment #4:**

The Environmental Protection Agency and the SCAQMD have long recognized that EPA Method 24 is not suitable for thin film UV/EB/LED Materials. Thus, [our organization] urges Maricopa County to include ASTM D7767-11 as suitable test method for UV/EB/LED products subject to Rule 336. We propose the following language: The VOC content of thin film Energy Curable Adhesives and Sealants may be determined by manufacturers using ASTM Test Method 7767 Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them.

**Response #4:**

Since ASTM D7767-11 is not currently an EPA-approved test method, the MCAQD could not include it in Rule 336. Adding a test method that is not EPA-approved to this rule could jeopardize EPA's approval of Rule 336 into the SIP. However, Section 503.2 of the rule does allow for the use of alternative EPA-approved test

methods. If ASTM D7767-11 is approved by the EPA in the future, then it can be considered as a suitable test method.

**Comment #5:**

UV/EB/LED products have higher viscosities than conventional solvent products. The rationale behind transfer efficiency requirements is to control VOC emissions that can take place during spraying operations. But, given the fact that UV/EB/LED materials do not have emissions like conventional solvent processes, facilities should not be required to the same level of regulation for transfer efficiency purposes. We urge Maricopa County to exempt UV/EB/LED materials with viscosities of 650 centipoise or above, from the transfer efficiency requirements of the rule. UV/EB materials not only meet, but far exceed any proposed rule requirements and any added flexibility to companies that choose these pollution preventive processes will encourage voluntary emission reductions thereby furthering the County's mission.

**Response #5:**

The MCAQD conducted research on facilities within Maricopa County that are currently using energy curable coating materials. We found these facilities are able to comply with the application methods listed in Section 302. As such, there appeared to be no operational need to revise the transfer efficiency requirements of Rule 336. In addition, an owner or operator is allowed to use an alternative application method other than those described in Section 302 of the rule for applications of surface coating materials containing less than or equal to 2 pounds of VOC per gallon (240 g/L), minus exempt compounds (VOC Regulatory as Applied).

Also, in order to exempt any new materials from the application methods listed in Section 302, the MCAQD would have had to submit a 110(l) demonstration to the EPA showing such an exemption would not interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable requirement of the Clean Air Act. It is not clear if the EPA would have approved such a demonstration and, if it was not approved, the added exemption could be seen as a relaxation of the rule. As mentioned in Response #1, any relaxation of the provisions of the rule could jeopardize the approval of Rule 336 into the Arizona SIP.

**EXACT WORDING OF THE RULE**

**MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS  
REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 336  
SURFACE COATING OPERATIONS AND INDUSTRIAL ADHESIVE APPLICATION  
PROCESSES**

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**MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS  
REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 336  
SURFACE COATING OPERATIONS AND INDUSTRIAL ADHESIVE APPLICATION  
PROCESSES**

**SECTION 100 – GENERAL**

- 101 PURPOSE:** To limit the emission of volatile organic compounds (VOCs) from surface coating operations and industrial adhesive application processes.
- 102 APPLICABILITY:** This rule applies to VOC-containing coatings and industrial adhesives listed in Tables 336-1 through 336-7 of this rule that are not ~~more specifically regulated by another source specific rule within Maricopa County Rules 300 to 359 of Regulation III, as listed in Section 104 of this rule.~~ Additionally:
- 102.1** Surface-coating activities regulated under this rule include, but are not limited to, the application of coating, coating preparation/mixing at the facility applying the coating, and the cleanup of ~~coating~~ application equipment.
- 102.2** Industrial adhesive application processes regulated under this rule include the application of industrial adhesives and industrial adhesive primers, preparation and mixing of industrial adhesives and industrial adhesive primers at the facility applying the industrial adhesive or the industrial adhesive primer, and the cleanup of application equipment.
- ~~102.2~~ **102.3** Section 103 sets forth partial exemptions for certain materials or uses employed by a surface coating operation or an industrial adhesive application process subject to this rule.
- ~~102.3~~ **102.4** This rule is not applicable to coatings, industrial adhesives, or industrial adhesive primers having a VOC content, minus exempt compounds, of less than 0.15lb VOC/gal (18g/L) nor to solvents having a VOC content of material less than 0.15lb VOC/gal.
- ~~102.4~~ **102.5** In addition to this rule, facilities may be subject to New Source Performance Standards (NSPS) in Rule 360 and/or to National Emission Standards for Hazardous Air Pollutants (NESHAP) in Rule 370 of these rules.
- 103 PARTIAL EXEMPTIONS:**
- 103.1 Qualified Materials Exemption:**
- a. Leak-Preventing Materials: Sealants, caulking, and similar materials, excluding industrial adhesives, used on the following substrates for the primary purpose of leak prevention are exempt from this rule:
- (1) Non-metallic substrates; and

(2) Substrates made post manufacture, such as, but not limited to, old joints and seals on pipe and valve assemblies.

b. Certain Joint Fillers: Caulking and beaded sealants used to fill gaps or to fill joints between surfaces are exempt from this rule, except those used in manufacturing other metal parts and products or in the manufacturing of cans, and excluding industrial adhesives.

103.2 ~~Extreme Performance Coatings Exemption: Extreme performance coatings are exempt from the VOC limits in Tables 336-1 through 336-7 of this rule but not from any other sections of this rule when used under the following conditions:~~

a. ~~On internal combustion engine components that are normally above 250°F (121°C) during use; or~~

b. ~~At temperatures above 250°F (121°C) on items that are both included under the North American Industry Classifications System (NAICS) codes 334210, 334220, 334290, 334416, 334417, 334418, 334419, 334310 or 336419 and are electronic products in space vehicles and/or are communications equipment.~~

403.3 **103.2 Plastic Parts Coating Exemption:** The following types of plastic parts coatings are exempt from the VOC limits in Tables 336-1 through ~~336-7~~ 336-6 of this rule but are subject to the remaining provisions of this rule.

a. Touch-up and repair coatings.

b. Stencil coatings applied on clear or transparent substrates.

c. Clear or translucent coatings.

d. Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings.

e. ~~Non-compliant Low usage coatings: After a sufficient demonstration by the owner or operator that no compliant substitute coating exists, an owner or operator is~~ Non-compliant coatings are permitted to use no more than for use if the annual aggregate usage does not exceed 50 gal/yr. gallons per year of an individual non-compliant coating, and not exceeding 200 gal/yr gallons per year total usage of all such coatings provided such coatings are approved for use in a Maricopa County Air Pollution Permit. The owner or operator shall update usage records of these coatings at the end of each month, pursuant to Section 501.2 of this rule.

f. Reflective coatings applied to highway cones.

g. Mask coatings that are less than 0.5 millimeter thick (dried) and the area coated is less than 25 square inches.

h. Electromagnetic Interference (EMI)/ Radio-Frequency Interference (RFI) shielding coatings.

i. Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 100 ~~gal/yr~~ gallons per year per facility.

j. ~~Business machine plastic part coatings:~~

- ~~(1) Texture coatings.~~
- ~~(2) Vacuum metalizing coatings.~~
- ~~(3) Gloss reducers.~~
- ~~(4) Adhesion primers.~~
- ~~(5) Electrostatic preparation coatings.~~
- ~~(6) Resist coatings.~~
- ~~(7) Stencil coatings.~~

403.4 **103.3**

**Application Methods Exemption:** The following coatings are exempt from application methods in Section 302 of this rule but are subject to the remaining provisions of this rule:

- a. Metal part texture coatings.
- b. Metal part touch-up and repair coatings.
- c. Plastic part coating for airbrush operations using less than 5 ~~gal/yr~~ gallons per year of coating.
- d. Extreme high gloss coatings for pleasure craft surface coating operations.

403.5 **103.4**

**Surface Coating Application Methods and ~~VOC Limit~~ VOC Limit**

**Exemption:** The following surface coating operations are exempt from Sections 301, 302, and 305 of this rule but shall comply with Section 303, 304, and 500 of this rule.

- a. Aerosol can spray coating.
- b. ~~Low Usage of VOC Coatings Which Exceed VOC Thresholds for Coating Categories Listed in Tables 336-1 Through 336-7 of this Rule: Non-compliant coatings~~ Coatings that exceed the VOC limits in Tables 336-1 through 336-6 of this rule are permitted for use if the annual aggregate usage of all such coatings does not exceed 55 gallons per year (208 liters/~~yr. per year~~) at a facility. The owner or operator shall update usage records of these coatings at the end of each month, pursuant to Section 501.2 of this rule.
- c. ~~A Small Surface Coating Source: A facility that has less than a 2-ton/year VOC~~ a VOC emission limit, not exceeding 2 tons/year in a Maricopa County Air Pollution Permit for surface coating operations regulated by this rule, in a Maricopa County Air Quality Permit.
- d. A Quality Class Q protective coating that is used on equipment, structures, and/or components within a containment facility of a nuclear power plant.
- e. ~~A tactical military equipment coating that is approved in a Maricopa County Air Pollution Permit subsequent to a sufficient demonstration by the user that no compliant substitute exists.~~
- f. **e.** Large Appliance Coating:
  - (1) Stencil coatings.

- (2) Safety-indicating coatings.
- (3) Solid-film lubricants.
- (4) Electric-insulating and thermal-conducting coatings.
- (5) Coating application utilizing aerosol can spray coating.

~~g.~~ **f.** Metal Parts Coating:

- (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.

**g.** Powder coating.

**103.5** **Industrial Adhesive Application Methods and VOC Limit Exemption:** The following industrial adhesive and industrial adhesive primer application processes are exempt from Sections 301, 302, and 305 of this rule but shall comply with Section 303, 304, and 500 of this rule.

- a.** Adhesives or adhesive primers being tested or evaluated in any research and development, quality assurance, or analytical laboratory.
- b.** Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems.
- c.** Adhesives or adhesive primers used in medical equipment manufacturing operations.
- d.** Cyanoacrylate adhesive application processes.
- e.** Adhesives and adhesive primers 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.
- f.** Polyester bonding putties used to assemble fiberglass parts at fiberglass boat manufacturing facilities and other reinforced plastic composite manufacturing facilities.
- g.** Adhesives and adhesive primers that are supplied in containers with a net volume of 16 ounces or less, or a net weight of one pound or less.

**103.6** **Industrial Adhesive Small Source Exemption:** Only the provisions of Section 501 of this rule shall apply to industrial adhesive application processes, industrial adhesive primer application processes, and related cleaning activities where the 12-month rolling total VOC emissions from all such processes are less than or equal to 3 tons before consideration of controls.

**104** **TOTAL CATEGORICAL EXEMPTIONS:** This rule does not apply to ~~the following~~ operations:

- 104.1** Aerospace coating operations (Rule 348). Coatings, adhesives, and adhesive primers listed in Tables 336-1 through 336-7 of this rule that are more specifically regulated by another source specific rule within Maricopa County Rules 300 to 359 of Regulation III, as listed below:
- a. Aerospace coating operations (Rule 348).
  - 104.2 **b.** Architectural coatings including buildings and erected structures (Rule 335).
  - 104.3 **c.** Solvent cleaning or stripping a surface for coating or other purpose (Rule 331).
  - 104.4 ~~Marine vessel exterior refinishing (EPA 453/B-97-001).~~
  - 104.5 **d.** Printing and graphic arts coating (Rule 337).
  - 104.6 **e.** Semiconductor manufacturing (Rule 338).
  - 104.7 **f.** ~~Coating or refinishing a highway vehicle or mobile equipment~~ Refinishing assembled motor vehicles and/or motor equipment (Rule 345).
  - 104.8 **g.** Coating wood furniture and fixtures (Rule 342).
  - 104.9 **h.** Coating wood millwork (Rule 346).
  - 104.2** Marine vessel exterior refinishing (EPA 453/B-97-001).
  - 104.3** Adhesives and adhesive primers that are used for any of the following purposes:
    - a. Janitorial services and consumer use of janitorial products.
    - b. Maintenance and upkeep activities (e.g., building maintenance, general repairs, welding, plumbing, and re-tarring roofs) provided these activities are not conducted as part of a manufacturing process and are not related to the source's primary business activity.
    - c. Repair or maintenance shop activities not related to the source's primary business activity.
    - d. Field applied adhesives (e.g. plastic solvent welding cements used by plumbers to join plumbing pipes on construction or repair jobs in the field, or adhesives that are used to attach flooring materials during a construction or renovation project).

**SECTION 200 – DEFINITIONS:** For the purpose of this rule, the following definitions shall apply, in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

- 201 **200.1** **ADHESIVE:** A material used for the primary purpose of bonding two or more surfaces together.
- 202 ~~ADHESION PRIMER:~~ A coating that is applied to a plastic polymer part to ~~mot~~ enhance the adhesion of a subsequent coating.
- 200.2** **ADHESIVE PRIMER:** Any product intended by the manufacturer to be applied to a substrate, prior to the application of an adhesive, to enhance the bonding surface.

- 203 **200.3** **AEROSOL CAN SPRAY COATING:** A coating sold in a hand-held, pressurized, non-refillable container, of less than 22 fluid ounces (0.66 liter) capacity, and that is expelled from the container in a finely divided form when a valve on the container is depressed.
- 204 **200.4** ~~AIR DRIED~~ **AIR DRIED COATING:** A coating dried by the use of air or forced warm air at temperatures ~~up to and including 200°F (93.3°C)~~ below 194°F (90°C).
- 200.5** **AIRLESS AND AIR-ASSISTED AIRLESS SPRAY:** Any paint spray technology that relies solely on the fluid pressure of the paint to create an atomized paint spray pattern and does not apply any atomizing compressed air to the paint before it leaves the paint nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized paint, but still uses fluid pressure to create the atomized paint.
- 205 ~~ALTERNATIVE APPLICATION METHODS:~~ Any method approved by the Administrator as HVLP-equivalent.
- 206 **200.6** **ANTIFOULANT COATING:** A coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms, and registered with the United States Environmental Protection Agency (EPA) as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136).
- 200.7** **APPLICATION EQUIPMENT:** Any equipment including, but not limited to, spray guns, wands, rollers, and brushes used to apply or cover a surface with a coating, an industrial adhesive, or an industrial adhesive primer, for either aesthetic, protective, adhesive, or other purpose.
- 207 **200.8** **AS APPLIED:** The formulation of a coating immediately prior to its application after the addition of all thinner, reducer, and other additives.
- 207 **200.9** **BAKED COATING:** A coating that is dried or cured ~~in an oven in which the oven~~ at a temperature exceeds 200°F (93.3°C) at or above 194°F (90°C).
- 208 ~~BUSINESS MACHINE:~~ A device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission, such as:
- 208.1 ~~Products classified as typewriters under SIC Code 3572;~~
- 208.2 ~~Products classified as electronic computing devices under SIC Code 3573;~~
- 208.3 ~~Products classified as calculating and accounting machines under SIC Code 3574;~~
- 208.4 ~~Products classified as telephone and telegraph equipment under SIC Code 3661;~~
- 208.5 ~~Products classified as office machines, not elsewhere classified, under SIC Code 3579; and (6) photocopy machines, a subcategory of products classified as photographic equipment under SIC Code 3861.~~
- 209 **200.10** **CAMOUFLAGE COATING:** A coating used, principally by the military, to conceal equipment from detection.

- 240 **200.11** **CAN COATING:** ~~A coating either used in the production of metal cans applied to the surface(s) of formed cans or a coating applied at a can making facility to the surface(s) of flat metal sheets or strips that are formed there into cans at the location where the coating is applied.~~
- 244 **200.12** **CAN PRINTING INK:** A fluid or viscous formulation used in can printing that imparts design, pattern, and/or alphanumeric symbols to a can.
- 200.13** **CERAMIC TILE INSTALLATION ADHESIVE:** An adhesive intended by the manufacturer for use in the installation of ceramic tiles.
- 242 ~~CLEAR COAT: A coating that lacks color or opacity or is transparent.~~
- 200.14** **CLEAR COATING:** A colorless coating which contains binders, but no pigment, and is formulated to form a transparent film.
- 243 ~~COATING APPLICATION EQUIPMENT: Any equipment including, but not limited to, spray guns, wands, rollers, brushes used to apply or cover a surface with a coating for either aesthetic, protection or other purpose.~~
- 244 **200.15** **COIL COATING:** A coating applied to the surface(s) of flat metal sheets or strips that is are formed into rolls or coils not used to make cans.
- 200.16** **CONTACT ADHESIVE:** An adhesive that is designed for application to both surfaces to be bonded together, that is allowed to dry before the two surfaces are placed in contact with each other, that forms an immediate bond that is impossible, or difficult, to reposition after both adhesive coated surfaces are placed in contact with each other, and does not require 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. This term does not include rubber cements that are primarily intended for use on paper substrates or vulcanizing fluids that are designed and labeled for tire repair only.
- 200.17** **COVE BASE INSTALLATION ADHESIVE:** An 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.
- 200.18** **CYANOACRYLATE ADHESIVE:** A fast-setting, single component adhesive containing cyanoacrylate compounds that cures at room temperature. Also known as "super glue."
- 245 **200.19** **DAY:** A period of 24 consecutive hours beginning at midnight.
- 246 **200.20** **DIP COATING:** A method of applying a coating to a substrate by submersion into and removal from a coating bath.
- 247 **200.21** **DRUM COATING:** Coating of a cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.
- 248 **200.22** **ELECTRIC DISSIPATING COATING:** A coating that rapidly dissipates a high-voltage electric charge.
- 200.23** **ELECTRIC-INSULATING AND THERMAL-CONDUCTING COATING:** A coating that displays an electrical insulation of at least 1000 volts

DC per mil on a flat test plate and an average thermal conductivity of at least 0.27 BTU per hour-foot-degree-Fahrenheit.

- 219 **200.24** ~~ELECTRIC INSULATING~~ **ELECTRIC-INSULATING VARNISH:** 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.
- 220 **200.25** **ELECTROMAGNETIC INTERFERENCE (EMI)/ RADIO-FREQUENCY INTERFERENCE (RFI) SHIELDING:** A coating used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static discharge.
- 221 **200.26** **ELECTROSTATIC SYSTEM:** A method of applying atomized paint by electrically charging the coating and the object being coated with opposing charges. A higher proportion of the coating reaches and coats the object than would occur in the absence of a charge.
- 222 **200.27** **EMISSION CONTROL SYSTEM (ECS):** A system, approved in writing by the Control Officer, to reduce emissions of volatile organic compounds. Such a system consists of an emissions collection system and an emissions processing subsystem.
- 223 **200.28** **END SEALING COMPOUND:** A compound which is coated onto can ends and functions as a gasket when the end is attached to the can.
- 224 **200.29** **ETCHING FILLER:** A coating that contains less than 23 percent solids by weight and at least ½ percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer.
- 225 **200.30** **EXEMPT COMPOUNDS:** The federally listed non-precursor organic compounds, which have been determined to have negligible photochemical reactivity as listed in 40 CFR 51.100(s)(1) and in Appendix G of these rules.
- 226 **200.31** **EXTERIOR CAN BASECOAT:** A coating applied to the exterior of a can to provide protection for the metal or to provide background for any lithographic or printing operation.
- 227 **200.32** **EXTREME HIGH-GLOSS COATING:** ~~A coating when tested by the ASTM D-523 adopted in 1980 that shows reflectance of 75 or more (95 or more for pleasure craft topcoats) on a 60° meter as determined by ASTM D523 (1999).~~
- 228 **200.33** ~~EXTREME PERFORMANCE~~ **EXTREME PERFORMANCE COATING:** ~~A coating used on a surface where the coated surface in its intended use is at temperatures consistently in excess of 250°F (121°C). A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to one of the following:~~
- a. Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or chemical solutions; or
  - b. Repeated exposure to temperatures in excess of 250°F (121°C); or
  - c. Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.

- 229 **200.34 FABRIC:** A textile material. Non-manufactured items from nature are not fabric except for natural threads, fibers, filaments, and similar items that have been manufactured into textile ~~fabrie~~ material.
- 230 **200.35 FABRIC COATING:** A decorative or protective coating or reinforcing material applied either onto or impregnated into textile fabric.
- 231 ~~FILLER: A relatively non-adhesive substance added to an adhesive to improve its working properties, permanence, strength, or other qualities.~~
- 232 **200.36 FILM COATING:** A coating applied in a web coating process on film substrate other than paper or fabric, including, but not limited to, typewriter ribbons, photographic film, magnetic tape, and metal foil gift wrap.
- 233 **200.37 FINISH PRIMER/SURFACER:** A coating applied 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. A finish primer/surfacer shall have a wet film thickness of less than 10 mils as determined by ASTM Method ~~D 1212-85~~ D1212-85. ~~A one-component finish primer is any finish primer where the coating resin cures without the need for an added catalyst or converter. A two-component finish primer is any finish primer where the coating resin cures only when a catalyst or converter is added.~~
- 234 ~~FLEXIBLE PLASTIC PART OR PRODUCT: A plastic part or product designed to withstand significant deformation without damaging it for its intended use. Not included are flexible plastic parts that are found on a can, coil, metal furniture, or large appliance, or that are already a part of an aerospace component, highway vehicle, mobile equipment, architectural building or structure, or a previously coated marine vessel.~~
- 200.38 FLEXIBLE VINYL:** Non-rigid polyvinyl chloride plastic that contains at least 5% plasticizer by weight.
- 200.39 FLOOR COVERING INSTALLATION ADHESIVE (INDOOR):** An 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. The term does not include adhesives used to install ceramic tile or perimeter bonded sheet flooring with vinyl backing onto a nonporous substrate like flexible vinyl.
- 200.40 FLOOR COVERING INSTALLATION ADHESIVE (OUTDOOR):** 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.
- 200.41 FLOOR COVERING INSTALLATION ADHESIVE (PERIMETER BONDED SHEET VINYL):** An adhesive intended by the manufacturer for use in 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.
- 235 **200.42 FLOW COAT:** A non-atomized technique of applying coatings to a substrate with a fluid nozzle in a fan pattern with no air supplied to the nozzle.

- 236 ~~FOG COAT: A coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture. A fog coat shall not be applied at a thickness of more than 0.5 mils of coating solids.~~
- 200.43** FOIL COATING: A web coating process which applies a continuous layer of coating material on a foil substrate across the entire width, or any portion of the width of a substrate to:
- a. Provide a covering, finish, functional, or protective layer on the substrate;
  - b. Saturate a substrate for lamination; or
  - c. Provide adhesion between two substrate for lamination.
- 237 ~~GLOSS REDUCER: A coating that is applied to a plastic part solely to reduce the shine of the part and is applied at a thickness of less than or equal to 0.5 mils of coating solids.~~
- 238 **200.44** HAND APPLICATION METHODS: Application of coatings, industrial adhesives, or industrial adhesive primers by non-mechanical, hand-held equipment including, but not limited to, paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.
- 239 **200.45** HEAT-RESISTANT COATING: A coating that must withstand a temperature of at least 400°F (204°C) during normal use.
- 241 **200.46** HIGH BUILD PRIMER/SURFACER: A coating applied for purposes of providing corrosion resistance, adhesion of subsequent coatings, or a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections. A ~~high-build~~ high build primer/surfacer shall have a ~~wet film~~ wet film thickness of 10 mils or more as determined by ASTM Method D1212-85.
- 242 **200.47** HIGH GLOSS COATING: A coating that achieves at least 85 percent reflectance on a 60° meter when tested by ASTM ~~D 523-89~~ D523-89.
- 240 **200.48** HIGH PERFORMANCE ARCHITECTURAL COATING: A coating used to protect architectural subsections and that meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).
- 243 **200.49** HIGH TEMPERATURE COATING: A coating that is certified to withstand a temperature of 1000°F (537°C) for 24 hours.
- 244 **200.50** HIGH-VOLUME, LOW PRESSURE (HVLP) SPRAY GUN: Spray equipment that is used to apply coating, industrial adhesive, or industrial adhesive primer by means of a spray gun that operates at 10 psig of atomizing air pressure or less at the center of the air cap. A permanently affixed manufacturer's gun identification or manufacturer's gun literature shall identify and be proof of an HVLP gun.

- 245 **200.51** **HIGHWAY VEHICLE:** A vehicle that is physically capable of being driven upon a highway including, but not limited to, cars, pickups, vans, trucks, truck-tractors, motor-homes, motorcycles, and utility vehicles.
- 200.52** **INDUSTRIAL ADHESIVE:** An adhesive used as part of an industrial manufacturing operation. For the purposes of this rule, industrial manufacturing includes activities and operations classified within Division D (Manufacturing) of the Standard Industrial Classification.
- 200.53** **INDUSTRIAL ADHESIVE PRIMER:** An adhesive primer used as part of an industrial manufacturing operation. For the purposes of this rule, industrial manufacturing includes activities and operations classified within Division D (Manufacturing) of the Standard Industrial Classification.
- 246 **200.54** **INTERIOR BASECOAT:** A coating applied to the interior of a can to provide a protective lining between the intended contents and the metal shell of the can.
- 247 **200.55** **INTERIOR BODY SPRAY:** A coating sprayed onto the interior of a can to provide a protective film between the intended contents and the metal shell of the can.
- 248 **200.56** **IN USE OR HANDLED:** Actively engaging the materials with activities such as mixing, depositing, brushing, rolling, padding, wiping or removing or transferring material into or out of the container.
- 249 **200.57** **LARGE APPLIANCE COATING:** A coating applied to a metal door, case, lid, panel, or interior support part of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, evaporative coolers, and other similar products.
- 250 **200.58** **LOW PRESSURE SPRAY GUN:** An air-atomized spray gun, which by design, functions best at air cap pressures below 10 psig (0.7 bar), measured according to Section 503.1(d) of this rule, and for which the manufacturer makes no public claims that the gun can be used effectively above 12 psig (0.8 bar).
- 251 **200.59** **MARINE VESSEL:** A tugboat, tanker, freighter, passenger ship, barge, or other boat, ship or watercraft used for commercial purposes. This definition excludes those boats used primarily for recreational purposes.
- 200.60** **MASK COATING:** A thin film coating applied through a template to coat a small portion of a substrate.
- 252 **200.61** **METAL FURNITURE COATING:** ~~Furniture~~ A coating applied to furniture made of metal or any metal part which will be assembled with other parts made of metal or other material(s) to form a furniture piece.
- 200.62** **METAL TO URETHANE/RUBBER MOLDING OR CASTING ADHESIVE:** An adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials in a heated molding or casting process.
- 253 **200.63** **METALLIC COATING:** A coating that contains more than 5 grams of metal particles per liter of coating as applied. Metal particles are pieces of a pure elemental metal or a combination of elemental metals.

- 254 **200.64** **MILITARY SPECIFICATION COATING:** A coating that has a formulation that has been approved by a United States Military Agency for use on military equipment.
- 200.65** **MISCELLANEOUS METAL PART AND PRODUCT COATINGS:** Coatings applied to a metal part or product, excluding the following types of coatings: can coatings, coil coatings, metal furniture coatings, large appliance coatings, and pleasure craft coatings.
- 200.66** **MISCELLANEOUS PLASTIC PART AND PRODUCT COATINGS:** Coatings applied to a plastic part or product, excluding pleasure craft coatings.
- 255 **200.67** **MOBILE EQUIPMENT:** Equipment that is physically capable of being driven or drawn on a highway including, but not limited to, construction vehicles (such as mobile cranes, bulldozers, concrete mixers); farming equipment (wheel tractor, plow, pesticide sprayer); hauling equipment (truck trailers, utility bodies, camper shells); and miscellaneous equipment (street cleaners, mopeds, golf carts).
- 256 **200.68** **MOLD-SEAL COATING:** The initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.
- 200.69** **MOTOR VEHICLE ADHESIVE:** An adhesive, including glass bonding adhesive, applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved.
- 200.70** **MOTOR VEHICLE GLASS BONDING PRIMER:** A primer, used at a facility that is not an automobile or light-duty truck 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. Motor vehicle glass bonding primer includes glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.
- 200.71** **MOTOR VEHICLE WEATHERSTRIP ADHESIVE:** An adhesive, used at a facility that is not an automobile or light-duty truck coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle.
- 257 **200.72** **MULTI-COLORED COATING:** A coating that is packaged in a single container, applied in a single coat, and exhibits more than one color when applied.
- 258 **200.73** **MULTI-COMPONENT COATING:** A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, prior to application to form an acceptable dry film.
- 200.74** **MULTIPURPOSE CONSTRUCTION ADHESIVE:** An adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile and acoustical tile.

- 259 **200.75** **ONE-COMPONENT COATING:** A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner necessary to reduce the viscosity is not considered a component.
- 260 **200.76** **OPTICAL COATING:** A coating applied to an optical lens.
- 261 ~~OTHER METAL PARTS AND PRODUCTS: Any metal part or product, excluding the following items that are made of metal: can, coil, furniture, large appliance, aerospace component, metal foil, metal textile fabric, semiconductor metal, highway vehicle, mobile equipment, an architectural building or structure, a previously coated marine vessel.~~
- 262 **200.77** **OVERVARNISH:** A coating applied to a can to reduce the coefficient of friction, to provide gloss, or to protect the finish against abrasion and/or corrosion.
- 263 **200.78** **PAN BACKING COATING:** A coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating element.
- 264 **200.79** **PAPER COATING:** A coating applied on or impregnated into paper, including, but not limited to, adhesive, adhesive tapes, book covers, post cards, office copier paper, and drafting paper.
- 265 **200.80** **PLASTIC:** ~~Substrates made from one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites. Any solid, synthetic: resin, polymer, or elastomer, except rubber. Substrates made from one or more resins, polymers, or elastomers, excluding rubber. Plastic substrates may be solid, porous, flexible, or rigid.~~ For the purposes of this rule, plastic film is considered film; fabric and paper made of polymeric plastic fibers are considered fabric and paper, respectively.
- 200.81** **PLASTIC SOLVENT WELDING ADHESIVE (ABS):** An adhesive intended by the manufacturer for use to dissolve the surface of acrylonitrile-butadiene-styrene (ABS) plastic, which is made by reacting monomers of acrylonitrile, butadiene and styrene, to form a bond between mating surfaces.
- 200.82** **PLASTIC SOLVENT WELDING ADHESIVE (EXCEPT ABS):** An adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces. This term does not include adhesives used to weld acrylonitrile-butadiene-styrene (ABS).
- 200.83** **PLASTIC SOLVENT WELDING ADHESIVE PRIMER:** Any primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.
- 266 **200.84** **PLEASURE CRAFT:** Vessels which are manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a person or business for recreational purposes.
- 267 **200.85** **PLEASURE CRAFT COATING:** A marine coating that is applied to or intended by the manufacturer to be applied to pleasure craft.

- 200.86** **POLYESTER BONDING PUTTIES:** Mixtures of resin and filler that are applied to reinforced plastic composite substrates and become part of the composite structure.
- 200.87** **POROUS MATERIAL:** A substrate whose surface does not prevent penetration by water.
- 268 **200.88** **PREFABRICATED ARCHITECTURAL COMPONENT COATING:** A coating applied to metal parts and products which are to be used as an architectural structure.
- 269 **200.89** **PRESSURE SENSITIVE TAPE OR LABEL COATING:** A permanently tacky adhesive that is applied to one side of a flexible strip of paper, backing material, or other material, ~~that is coated on one side with a permanently tacky adhesive~~ which will adhere the strip of material to a variety of surfaces with light pressure.
- 270 **200.90** **PRETREATMENT COATING:** A coating containing no more than 12 percent solids by weight, and at least  $\frac{1}{2}$  0.5 percent acid; by weight, that is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.
- 271 **200.91** **PRETREATMENT WASH PRIMER:** A coating that contains no more than 12 percent solids, by weight, and at least  $\frac{1}{2}$  0.5 percent acids; by weight, that is used to provide surface etching, and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.
- 200.92** **PRIMARY BUSINESS ACTIVITY:** An operation to manufacture or repair an item or product that will be sold to another entity, or an operation to manufacture or repair an item or product that was previously sold to another entity. For the purpose of this rule, primary business activity does not include the construction, installation, maintenance, or repair of equipment that will be used at the manufacturing facility and will not be produced for sale to other entities.
- 272 **200.93** **PRIMER:** A coating applied directly to substrate for any one or combination of the following purposes: corrosion prevention, protection from the environment, functional fluid resistance, or adhesion of subsequent coatings.
- 273 **200.94** **QUALITY CLASS Q:** A system, structure, coating, or other component that, if defective or inoperable, could cause or increase the severity of a nuclear incident, thereby imposing undue risk to the health and safety of the public.
- 274 **REFRIGERATED GLASS DOOR COATING:** ~~A two-component coating or ink used for the manufacturing of refrigerated glass doors that forms a decorative or protective film and provides a substrate for bonding materials such as seals, spacers, and sealants.~~
- 275 **200.95** **REPAIR COATING:** A coating used to recoat the portion of a completed finish that suffered post-production damage at the facility where the finish was applied.
- 200.96** **SAFETY-INDICATING COATING:** A coating that changes physical characteristics, such as color, to indicate unsafe conditions.

- 200.97 SHEET APPLIED RUBBER LINING ADHESIVE:** An adhesive or an adhesive primer that is used to bond sheets or strips of rubber to metal equipment so that such rubber sheathing directly contacts material received by the metal and so protects the metal.
- 200.98 SHEET BASECOAT:** A coating applied to a sheet of metal, which will be rolled to form the cylinder of a three-piece can, to provide protection for the metal or to provide background for any lithographic or printing operation.
- 276 **200.99 SHOCK-FREE COATING:** A coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance, and having resistance to breaking down under high voltage.
- 277 **200.100 SILICONE RELEASE COATING:** ~~A resin coating, the major cured portion of which is contains silicone resin, having as its primary function the release of and is intended to prevent~~ food products from sticking to metal surfaces such as baking pans.
- 200.101 SINGLE-PLY ROOF MEMBRANE ADHESIVE PRIMER:** A primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.
- 200.102 SINGLE-PLY ROOF MEMBRANE INSTALLATION/REPAIR ADHESIVE (EXCEPT EPDM):** An adhesive intended by the manufacturer for use in the installation or repair of single-ply roof membrane. For the purposes of this rule, a single-ply roof membrane is a prefabricated single sheet of elastomeric material that is applied to a building roof using one layer of membrane material. This definition does not include adhesives used to install roof membranes composed of ethylene propylene diene monomer.
- 278 ~~SMALL SURFACE COATING SOURCE (SSCS): A facility from which the total VOC emissions for all surface coating operations that are subject to this rule without, or prior to, any emission control, is less than 2 tons/yr (1814 kg); as demonstrated by both adequate records of coating and diluent use (according to Section 501.2 of this rule) and a separate tally of the number of days each month such coating operations occur.~~
- 279 **200.103 SOLAR-ABSORBENT COATING:** A coating with the prime purpose of absorption of solar radiation.
- 200.104 SOLID-FILM LUBRICANT:** A very thin coating consisting of a binder system containing as its chief pigment material one or more of molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between faying surfaces.
- 280 **200.105 STENCIL COATING:** An ink or a coating that is rolled or brushed onto a template or stamp in order to add identifying letters, symbols and/or numbers.
- 281 **200.106 STRIPPABLE BOOTH COATING:** A temporary coating that is applied to spray booth surfaces to receive the overspray and protect the surfaces, and which is designed to readily be pulled off the substrate in strips or sheets, and disposed of.

- 200.107** **STRUCTURAL GLAZING:** The application of adhesive to bond glass, ceramic, metal, stone or composite panels to exterior building frames.
- 282 **200.108** **SURFACE COATING:** A liquid, fluid, or mastic composition that is converted to a solid (or semi-solid) protective, decorative, or adherent film or deposit after application as a thin layer. Surface coating is generally distinct and different from impregnation and from applying adhesive for bonding purposes.
- 283 **200.109** **SURFACE COATING OPERATION:** Preparation, handling, mixing, and application of surface coating, and cleanup of application equipment and enclosures at a facility where surface coating is applied.
- 284 **200.110** **TEXTURE COATING:** A coating that is applied which, in its finished form, consists of discrete raised spots of the coating.
- 200.111** **THIN METAL LAMINATING ADHESIVE:** 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.
- 200.112** **THREE-PIECE CAN:** A can manufactured from a rectangular sheet and two circular ends, where the metal sheet is rolled into a cylinder and soldered, welded, or cemented at the seam.
- 285 **200.113** **THREE-PIECE CAN SIDE-SEAM COATING SPRAY:** A coating sprayed onto the interior and/or exterior of a can body seam on a three-piece can to protect the exposed metal.
- 200.114** **TIRE REPAIR:** A process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding, gouging, or applying adhesive and filling the hole or crevice with rubber.
- 286 **200.115** **TOPCOAT:** The final, permanent, coating formulation that completes the finish on a surface.
- 287 **200.116** **TOUCH-UP COATING:** A coating used to cover minor coating imperfections after the main coating operation. This includes touch-up coating that accompanies the purchase of an object already coated with that coating.
- 288 ~~**TRANSFER EFFICIENCY:** The ratio of the weight of coating solids adhering to the part being coated to the weight of coating solids used in the application process expressed as a percentage.~~
- 200.117** **TRANSLUCENT COATING:** A coating which contains binders and pigment and is formulated
- 200.118** **TWO-PIECE CAN:** A can that is drawn and wall-ironed from a shallow cup and requires only one end which is attached after the can is filled with a product.
- 289 **200.119** **TWO-PIECE CAN EXTERIOR END COATING:** A coating applied to the exterior end of a can to provide protection to the metal.
- 290 **200.120** **VACUUM METALIZING COATING:** ~~The~~ An undercoat applied to the a substrate on which metal is deposited using a vacuum metalizing process, or the an overcoat applied directly to the metal film formed by a vacuum metalizing process.

Vacuum metalizing is the process of evaporating metals inside a vacuum chamber and then bonding the metals to the desired ~~substate~~ substrate to achieve a uniform metalized layer.

291 **200.121 VINYL COATING:** A decorative, ~~or~~ protective, ~~coating~~ or reinforcing coating applied over vinyl-coated textile fabric or vinyl sheets.

292 **200.122 VOC ACTUAL:** The weight of volatile organic compounds minus the weight of water and minus the weight of exempt organic compounds divided by the total volume of the materials. Units of VOC Actual are in pounds of VOC per gallon (or grams per liter) of material and shall be calculated using the following equation:

$$\text{VOC Actual} = \frac{W_s - W_w - W_{es}}{V_m}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$  = weight of all volatile material in pounds (or grams), including VOC, water, non-precursor organic compounds and dissolved vapors

$W_w$  = weight of water in pounds (or grams)

$W_{es}$  = weight of all non-precursor organic compounds in pounds (or grams)

$V_m$  = volume of total material in gallons (or liters)

293 **200.123 VOC CONTENT:** The organic chemicals in a material that have a vapor pressure at ordinary room temperature. This vapor pressure results from a low boiling point, which causes large numbers of molecules to evaporate or sublimate from the liquid or solid form of the compound and enter the surrounding air. The term VOC content is a general term used throughout the rule and includes VOC, VOC Actual, and VOC Regulatory.

294 **200.124 VOC REGULATORY:** The weight of volatile organic compounds minus the weight of water and minus the weight of exempt compounds divided by the volume of material minus the volume of water and minus the volume of exempt compounds. Units of VOC Regulatory are in pounds of VOC per gallon (or grams per liter) of material and shall be calculated using the following equation:

$$\text{VOC Regulatory} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$  = weight of all volatile material in pounds (or grams), including VOC, water, non-precursor organic compounds and dissolved vapors

$W_w$  = weight of water in pounds (or grams)

$W_{es}$  = weight of all non-precursor organic compounds in pounds (or grams)

$V_m$  = volume of total material in gallons (or liters)

$V_w$  = volume of water in gallons (or liters)

$V_{es}$  = volume of all non-precursor organic compounds in gallons (or liters)

**200.125 WATERPROOF RESORCINOL GLUE:** A two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

## SECTION 300 – STANDARDS

**301 SURFACE COATINGS AND INDUSTRIAL ADHESIVES:** An owner or operator shall comply with one of the following for all applications of surface coatings, industrial adhesives, and industrial adhesive primers:

**301.1** ~~Meet~~ Comply with the VOC limits in Tables 336-1 through 336-7 of this rule. ~~Coating limits are calculated as VOC Regulatory (as applied). Compliance will be determined based on by comparing VOC Regulatory as Applied to the applicable VOC content limit, as expressed in metric units. English units are provided for information only; or~~

**301.2** Operate an Emission Control System (ECS) in accordance with Section 305 of this rule when applying a coating or an industrial adhesive that exceeds the applicable VOC limits in Tables 336-1 through 336-7 of this rule. All ~~VOC~~ coatings, industrial adhesives, and industrial adhesive primers used that exceed the applicable VOC limits in Tables 336-1 through 336-7 of this rule shall be clearly labeled such that ~~coating~~ operators are informed that an ECS must be used during application ~~of surface coatings; or~~

**301.3** Qualify for an exemption under Sections 103 or 104 of this rule.

**Table 336-1: Coating Limits for Metal Parts and Products VOC Limits for Miscellaneous Metal Part and Product Coatings**

Coating Category	Air Dried		Baked	
	g VOC/l	lb VOC/gal	g VOC/l	lb VOC/gal
Camouflage	420	3.5	420	3.5
Drum Coating, New, Exterior	340	2.8	340	2.8
Drum Coating, New, Interior	420	3.5	420	3.5
Drum Coating, Reconditioned, Exterior	420	3.5	420	3.5
Drum Coating, Reconditioned, Interior	500	4.2	500	4.2
Electric-Insulating Varnish	420	3.5	420	3.5
Etching Filler	420	3.5	420	3.5
Extreme High-Gloss	420	3.5	360	3.0
Extreme Performance	420	3.5	360	3.0

Coating Category	Air Dried		Baked	
	g VOC/l	lb VOC/gal	g VOC/l	lb VOC/gal
Heat-Resistant	420	3.5	360	3.0
High Performance Architectural	740	6.2	740	6.2
High Temperature	420	3.5	420	3.5
Metallic	420	3.5	420	3.5
Military Specification	340	2.8	280	2.3
Mold-Seal Coating	420	3.5	420	3.5
<del>Multi-Component</del>	<del>340</del>	<del>2.8</del>	<del>280</del>	<del>2.3</del>
<del>One-Component</del>	<del>340</del>	<del>2.8</del>	<del>280</del>	<del>2.3</del>
Pan Backing	420	3.5	420	3.5
Prefabricated Architectural <del>Multi-Component</del>	420	3.5	280	2.3
<del>Prefabricated Architectural One-Component</del>	<del>420</del>	<del>3.5</del>	<del>280</del>	<del>2.3</del>
Pretreatment Coating	420	3.5	420	3.5
Repair	420	3.5	360	3.0
Silicone Release	420	3.5	420	3.5
Solar-Absorbent	420	3.5	360	3.0
Touch-up	420	3.5	360	3.0
Vacuum Metalizing	420	3.5	420	3.5
Other <del>Miscellaneous Metal Parts and Products Part and Product Coatings: Includes Non-Adhesive Coating, Adhesive, Adhesive Primer, Beaded Sealant, and Caulking</del>	<del>420</del> <u>340</u>	<del>3.5</del> <u>2.8</u>	<del>360</del> <u>280</u>	<del>3.0</del> <u>2.3</u>
Strippable Booth Coating	240	2.0	–	–

**Table 336-2: Coating Limits for Cans and Coils VOC Limits for Can and Coil Coatings**

Coating Category	g VOC/l	lb VOC/gal
<b>Can Coating</b>		
Can Printing Ink	300	2.5
End Sealing Compound	<del>440</del> <u>20</u>	<del>3.7</del> <u>0.2</u>
Sheet Basecoat (Exterior and Interior) and Overvarnish	<del>340</del> <u>250</u>	<del>2.8</del> <u>2.1</u>
Three-Piece Can Side-Seam Spray	660	5.5
Two and Three-Piece Can Interior Body Spray	<del>510</del> <u>440</u>	<del>4.2</del> <u>3.7</u>
Two-Piece Can Exterior (Basecoat and Overvarnish)	<del>340</del> <u>250</u>	<del>2.8</del> <u>2.1</u>
Two-Piece Can Exterior End (Spray or Roll Coat)	<del>510</del> <u>250</u>	<del>4.2</del> <u>2.1</u>
<b>Coil Coating</b>		
Strippable Booth Coating (applies to both can and coil coating categories)	240	2.0

**Table 336-3: Coating Limits for Plastic Parts and Products VOC Limits for Miscellaneous Plastic Part and Product Coatings**

Coating Category	g VOC/l	lb VOC/gal
Electric Dissipating Coatings	800	6.7
Extreme Performance, <u>Multi-Component</u>	420 (2-pack coatings)	3.5 (2-pack coatings)
<u>Flexible Plastic Parts and Products</u>		
Basecoat	540	4.5
Clearcoat	540	4.5
Color Topcoat	450	3.8
Primer	490	4.1
Metallic	420	3.5
Military Specification, <u>Multi-Component</u>	340 (1 pack) 420 (2 pack)	2.8 (1 pack) 3.5 (2 pack)
<u>Military Specification, One-Component</u>	<u>340</u>	<u>2.8</u>
Mold-Seal Coating	760	6.3
Multi-Colored Coating	680	5.7
<del>Multi-Component</del>	<del>420</del>	<del>3.5</del>
<del>One-Component</del>	<del>280</del>	<del>2.3</del>
Optical Coatings	800	6.7
<del>Plastic Parts and Products that Are Not Defined as Flexible</del>	<del>420</del>	<del>3.5</del>
Shock-Free Coatings	800	6.7
Vacuum Metalizing	800	6.7
<u>Other Coatings, Multi-Component</u>	<u>420</u>	<u>3.5</u>
<u>Other Coatings, One-Component</u>	<u>280</u>	<u>2.3</u>
Strippable Booth Coating	240	2.0

Table 336-4: Coating Limits for Business Machines

Coating Category	g VOC/l	lb VOC/gal
Fog Coat	260	2.2
Primer	350	2.9
Repair	350	2.9
Texture Coating	350	2.9
Topcoat	350	2.9
Touch-up	350	2.9
Strippable Booth Coating	240	2.0

Table 336-5 ~~336-4~~: Coating VOC Limits for Metal Furniture and Large Appliances Appliance Coatings

Coating Category	Air Dried		Baked	
	g VOC/l	lb VOC/gal	g VOC/l	lb VOC/gal
Extreme High Gloss	340	2.8	360	3.0
Extreme Performance	420	3.5	360	3.0
Heat-Resistant	420	3.5	360	3.0
Metallic	420	3.5	420	3.5
Pretreatment Coating	420	3.5	420	3.5
<del>Refrigerated Glass Door Coating</del>	<del>480</del>	<del>4.0</del>	<del>-</del>	<del>-</del>

Coating Category	Air Dried		Baked	
	g VOC/l	lb VOC/gal	g VOC/l	lb VOC/gal
Solar-Absorbent	420	3.5	360	3.0
<u>Other Coatings: Multi-Component</u>	340	2.8	275	2.3
<u>Other Coatings: One-Component</u>	275	2.3	275	2.3
Strippable Booth Coating	240	2.0	–	–

**Table 336-6 336-5: Coating VOC Limits for Paper, Fabric, Film, Foil, and Vinyl Coatings**

Coating Category	kg VOC/kg Coating (lb VOC/lb coating)	kg VOC/kg Solids (lb VOC/lb solids)	g VOC/l	lb VOC/gal
Fabric	–	–	350	2.9
Paper, Film, and Foil <u>Surface Coating (Including Adhesives, Not Including Pressure Sensitive Tape and Label Coatings)</u>	0.08	0.40	–	–
Pressure Sensitive Tape and Label <u>Surface Coating (Including Adhesives)</u>	0.067	0.20	–	–
Vinyl	–	–	450	3.8
Strippable Booth Coating	–	–	240	2.0

**Table 336-7 336-6: Coating VOC Limits for Pleasure Craft Coatings**

Coating Category	g VOC/l	lbs VOC/gal
<u>Aluminum Substrate Antifoulant Coating – Aluminum Substrate</u>	560	4.7
<u>Other Substrate Antifoulant Coating – Non-Aluminum Substrate</u>	<del>400</del> <u>330</u>	<del>3.4</del> <u>2.8</u>
Extreme High Gloss Topcoat	<del>600</del> <u>490</u>	<del>5.2</del> <u>4.1</u>
Finish Primer/Surfacer	<del>600</del> <u>420</u>	<del>5.2</del> <u>3.5</u>
High Build Primer/Surfacer	340	2.8
High Gloss Topcoat	420	3.5
Pretreatment Wash Primer	780	6.5
All Other Pleasure Craft <u>Surface Coatings for Metal or Plastic</u>	420	3.5
Strippable Booth Coating	240	2.0

**Table 336-7: VOC Limits for Industrial Adhesives**

Adhesive Category	g VOC/l	lbs VOC/gal
<b><u>Specialty Industrial Adhesives</u></b>		
<u>Ceramic Tile Installation</u>	<u>130</u>	<u>1.1</u>
<u>Contact Adhesive</u>	<u>250</u>	<u>2.1</u>
<u>Cove Base Installation</u>	<u>150</u>	<u>1.3</u>
<u>Floor Covering Installation (Indoor)</u>	<u>150</u>	<u>1.3</u>
<u>Floor Covering Installation (Outdoor)</u>	<u>250</u>	<u>2.1</u>
<u>Floor Covering Installation (Perimeter Bonded Sheet Vinyl)</u>	<u>660</u>	<u>5.5</u>
<u>Metal to Urethane/Rubber Molding or Casting</u>	<u>850</u>	<u>7.1</u>

<b>Adhesive Category</b>	<b>g VOC/l</b>	<b>lbs VOC/gal</b>
<u>Motor Vehicle Adhesive</u>	<u>250</u>	<u>2.1</u>
<u>Motor Vehicle Weatherstrip Adhesive</u>	<u>750</u>	<u>6.3</u>
<u>Multipurpose Construction</u>	<u>200</u>	<u>1.7</u>
<u>Plastic Solvent Welding (ABS)</u>	<u>400</u>	<u>3.3</u>
<u>Plastic Solvent Welding (Except ABS)</u>	<u>500</u>	<u>4.2</u>
<u>Sheet Applied Rubber Lining Adhesive</u>	<u>850</u>	<u>7.1</u>
<u>Single-Ply Roof Membrane Installation/Repair (Except EPDM)</u>	<u>250</u>	<u>2.1</u>
<u>Structural Glazing</u>	<u>100</u>	<u>0.8</u>
<u>Thin Metal Laminating</u>	<u>780</u>	<u>6.5</u>
<u>Tire Repair</u>	<u>100</u>	<u>0.8</u>
<u>Waterproof Resorcinol Glue</u>	<u>170</u>	<u>1.4</u>
<b><u>Other Industrial Adhesives Used to Bond*</u></b>		
<u>Reinforced Plastic Composite</u>	<u>200</u>	<u>1.7</u>
<u>Flexible vinyl</u>	<u>250</u>	<u>2.1</u>
<u>Metal</u>	<u>30</u>	<u>0.3</u>
<u>Porous Material (Except Wood)</u>	<u>120</u>	<u>1.0</u>
<u>Rubber</u>	<u>250</u>	<u>2.1</u>
<u>Wood</u>	<u>30</u>	<u>0.3</u>
<u>Other Substrates</u>	<u>250</u>	<u>2.1</u>
<b><u>Industrial Adhesive Primers</u></b>		
<u>Motor Vehicle Glass Bonding Primer</u>	<u>900</u>	<u>7.5</u>
<u>Plastic Solvent Welding Adhesive Primer</u>	<u>650</u>	<u>5.4</u>
<u>Single-Ply Roof Membrane Adhesive Primer</u>	<u>250</u>	<u>2.1</u>
<u>Other Adhesive Primer</u>	<u>250</u>	<u>2.1</u>

\* The applicable VOC limit for other industrial adhesives shall be determined based on composition of the substrates that the industrial adhesive will be used to bond. If the industrial adhesive will be used to bond dissimilar substrates, the higher VOC content shall apply.

### **302 APPLICATION METHODS FOR SURFACE COATINGS AND INDUSTRIAL ADHESIVES:**

**302.1** An owner or operator shall use one of the following methods for all applications of surface coating materials containing more than 2 pounds of VOC per gallon (240 g/L), minus exempt compounds (VOC Regulatory as Applied), and for all applications of industrial adhesives and industrial adhesive primers:

- a. HVLP spray gun;
- b. Electrostatic system;
- c. A system that atomizes principally by hydraulic pressure, including “airless” and “air assisted airless”;
- d. Hand application methods, including but not limited to;
  - (1) Flow Coat;
  - (2) Roll Coat;

(3) Dip-Coating; ~~or~~

- e. ~~An Alternative Application Method:~~ Any method approved by the Administrator as HVLP-equivalent.

**302.2** An owner or operator is allowed to use an application method other than that described in Section 302.1 of this rule:

- a. For applications of surface coating materials containing less than or equal to 2 pounds of VOC per gallon (240 g/L), minus exempt compounds (VOC Regulatory as Applied).
- b. For applications of surface coating materials containing more than 2 pounds of VOC per gallon (240 g/L), minus exempt compounds (VOC Regulatory as Applied) and for all applications of industrial adhesives, and industrial adhesive primers:
- (1) If VOC emissions from the ~~finishing~~ application of surface coating materials, industrial adhesives, and industrial adhesive primers are captured and directed to an ECS complying with the provisions of Section 305 of this rule; or
  - (2) If coating the inside of pipes and tubes with a wand-style applicator; or
  - (3) If using an airbrush or other small gun that has a reservoir capacity not exceeding 250 cc (8.8 fl. oz.) and is used solely for detailing, lettering, touch-up, and/or repair.

**303** **CLEANUP OF APPLICATION EQUIPMENT:** An owner or operator shall comply with the following when using VOC-containing material to clean application equipment:

**303.1** ~~Spray-Gun~~ **Spray Gun Cleaning Requirements:**

- a. Clean ~~spray-guns~~ spray guns without spraying or atomizing a solvent ~~cleaner~~ with the gun.
- b. ~~Spray-Gun~~ **Spray Gun Cleaning Machine:** Use a ~~spray-gun~~ spray gun cleaning machine that complies with the following requirements unless the owner or operator complies with the manual ~~spray-gun~~ spray gun cleaning requirements in Section 303.2 of this rule.
- (1) ~~Spray-Gun Cleaning Machine-General Requirements~~ **General Requirements for Spray Gun Cleaning Machines:** The ~~spray-gun~~ spray gun cleaning machine shall meet all of the following requirements:
- (a) Be designed to clean ~~spray-guns~~ spray guns.
  - (b) Have at least one pump that drives solvent ~~cleaner~~ through and over the ~~spray-gun~~ spray gun.
  - (c) Have a basin which permits containment of the solvent ~~cleaner~~.
  - (d) Be kept in proper repair and free from liquid leaks.
  - (e) Be fitted with a cover.
  - (f) Be located on-site where the spray application occurs; and

(g) Be operated and maintained according to manufacturer's or distributor's instructions.

**(h) Porous Material:**

- (i) Do not clean nor use porous or absorbent materials to clean parts or products in a cleaning machine. For the purpose of this rule, porous or absorbent materials include, but are not limited to, cloth, leather, wood, and rope.
- (ii) Do not place an object with a sealed wood handle, including a brush, in or on a cleaning machine.
- (iii) Do not place porous or absorbent materials, including, but not limited to, cloth, leather, wood, and rope in or on a cleaning machine.

**(i) Pressurized Air Lines:** Pressurized air lines shall only be connected to the spray gun cleaning machine if all of the following requirements are met:

- (i) The manufacturer's operating manual for the gun cleaning machine recommends the use of a pressurized air line during gun cleaning;
- (ii) The air pressure in the line does not exceed 10 psig or the pressure recommended in the manufacturer's operating manual for the gun cleaning machine, whichever is lower;
- (iii) The use of the air pressure line does not cause solvent to splash outside of the gun cleaning machine;
- (iv) The manufacturer's operating manual for the gun cleaning machine is available for the operator of the gun cleaning machine;  
and
- (v) The owner or operator of the gun cleaning machine makes the manufacturer's operating manual for the gun cleaning machine available to the Control Officer upon request.

**(2) ~~Automatic Spray-Gun~~ Spray Gun Cleaning Machine:** An automatic ~~spray-gun~~ spray gun cleaning machine shall have a self-covering or enclosing cover feature that in the cover's closed position allows no gaps exceeding 1/8 inch (3 mm) between the cover and the cabinet. This self-enclosing feature shall be maintained and consistently cover or enclose to these gap limits.

**(3) Non-Automatic Remote Reservoir Cleaning Machine:** A non-automatic remote reservoir cleaning machine shall meet all of the following requirements:

- (a) Drain solvent ~~cleaner~~ from the sink/work-space into a remote reservoir when work-space is not in use;

(b) ~~Machine~~ The reservoir shall not have cumulative total openings, including the drain opening(s), exceeding two square inches in area; and

(c) The base of the sink/work-space may function as the reservoir's top surface, as long as the fit/seal between sink base and reservoir container allows the reservoir to meet the opening limits specified in Section 303.1(b)(3)(b) of this rule.

**303.2 Manual ~~Spray-Gun~~ Spray Gun Cleaning Requirements:** An owner or operator manually cleaning ~~spray-guns~~ spray guns shall comply with the following requirements:

a. Disassembled ~~spray-guns~~ spray guns must be cleaned by non-mechanical, hand-held method of application of cleaners.

b. If disassembled ~~spray-guns~~ spray guns are soaked they shall remain covered at all times, except when the application equipment is being handled in the container or transferred into or out of the container.

**304 WORK PRACTICES-HANDLING, DISPOSAL AND STORAGE OF VOC-CONTAINING MATERIAL:** An owner or operator of any surface coating ~~facility operation, industrial adhesive application process, or industrial adhesive primer application process~~ shall store, handle, and dispose of VOC-containing material in a manner that prevents the evaporation of VOC to the atmosphere. Work practices limiting VOC emissions include, but are not limited to, all of the following:

**304.1 Use and Storage:** ~~An owner or operator shall cover~~ Cover and keep covered each VOC-containing material which is not currently in use. ~~An owner or operator shall store finishing and cleaning~~ Store all VOC-containing materials in closed or covered leak-free containers.

**304.2 Disposal of VOC-Containing Material:** ~~An owner or operator shall store~~ Store all VOC-containing materials intended for disposal including, but not limited to, rags, waste coatings, waste brushes, waste rollers, waste applicators, waste solvents, and their residues, in closed, leak free containers. The containers shall remain covered with a leak tight cover, when not in use.

**304.3** Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials.

**304.4** Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.

**304.5** Containers in which VOC-containing materials are stored must have a legible label identifying the container's contents.

**305 EMISSION CONTROL SYSTEM (ECS) REQUIREMENTS:**

**305.1 ECS Control Efficiencies:** To meet the requirements pursuant to Section 301.2 of this rule, an ECS shall be operated as follows:

a. **Overall ECS Efficiency:** The overall control efficiency of an ECS shall be determined by multiplying the capture efficiency by the destruction efficiency of the control device expressed as a percentage. An owner or operator, who

chooses to use an ECS instead of meeting the limits in Tables 336-1 through ~~336-7~~ 336-6 of this rule and specified application methods, shall operate an ECS that has a 90 percent overall ECS efficiency. An owner or operator, who chooses to use an ECS instead of meeting the limits in Table 336-7 of this rule and the specified application methods in Section 302 of this rule, shall operate an ECS that has an 85 percent overall ECS efficiency.

- b. **Alternative for Very Dilute Input:** For VOC input-concentrations of less than 100 ppm (as methane) at the inlet of the ECS, the control efficiency is satisfied if the VOC output is less than 20 mg VOC/m<sup>3</sup>(as methane) adjusted to standard conditions.

**305.2 Operation and Maintenance (O&M) Plan Required for ECS:**

- a. An owner or operator shall provide and maintain (an) O&M Plan(s) for any ECS, ~~any other emission processing equipment,~~ and any ECS monitoring devices used pursuant to this rule or to a Maricopa County Air ~~Pollution~~ Quality Permit.
- b. The owner or operator shall submit to the Control Officer for approval the O&M Plans of each ECS and each ECS monitoring device used pursuant to this rule.
- c. The owner or operator shall comply with all identified actions and schedules provided in each O&M Plan.

**305.3 Providing and Maintaining ECS Monitoring Devices:** An owner or operator incinerating, adsorbing, or otherwise processing VOC emissions pursuant to this rule shall provide, properly install and maintain in calibration, in good working order devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if ~~air pollution control equipment~~ the ECS is functioning properly and is properly maintained. Records shall be kept pursuant to Section 502 of this rule which demonstrate that the ECS meets the overall control standard required by Section 305.1 of this rule and is operated in accordance with the equipment manufacturer's specifications.

**305.4 O&M Plan Responsibility:** An owner or operator of a facility that is required to have an O&M Plan pursuant to Section 305.2 of this rule must fully comply with all O&M Plans that the owner or operator has submitted for approval, but which have not yet been approved, unless notified otherwise by the Control Officer in writing.

**305.5 Operation and Maintenance (O&M) Plan Contents for an ECS:** An O&M Plan for any ECS including any ECS monitoring devices shall include all of the following information:

- a. ECS equipment manufacturer;
- b. ECS equipment model;
- c. ECS equipment identification number or identifier that owner or operator subject to this rule assigns to such ECS equipment when manufacturer's equipment identification number is unknown; and

- d. Information required by Sections 502 and 503 of this rule.

## SECTION 400 – ADMINISTRATIVE REQUIREMENTS

**401 COMPLIANCE SCHEDULE ~~VOC LIMITS~~ ECS INSTALLATION:** An owner or operator installing an ECS as an alternative to complying with the VOC limits in Section 301.1 of this rule shall:

- ~~401.1 Emission Control System (ECS): An owner or operator installing an ECS shall:~~
  - a. **401.1** Implement all recordkeeping provisions, including Section 502 of this rule, upon adoption of this rule.
  - b. **401.2** ~~Announce the intention to use an ECS to~~ Notify the Control Officer in writing ~~if the that an ECS is~~ will be installed and used as an alternative to meeting the VOC limits of Section 301.1 of this rule by December 1, 2021.
- ~~401.2 VOC Limits and Rule Requirements: Upon adoption of this rule, the owner or operator shall discontinue purchase of materials that are non-compliant with Section 301.1 of this rule. The owner or operator has up to May 2, 2017 to complete use of existing non-compliant materials already purchased. A schedule for phasing out non-compliant materials shall be prepared and made available to an inspector upon request. This schedule shall specify that only compliant materials will be used after May 2, 2017.~~
- 401.3** Attain full compliance with all applicable standards in this rule by September 1, 2022.

**402 COMPLIANCE SCHEDULE ~~O&M PLAN~~ FOR NEW VOC LIMITS:** ~~O&M Plans for ECS equipment subject to this rule shall be revised/updated by February 2017. The Control Officer shall notify the applicant in writing of approval or denial. Upon adoption of this rule, the owner or operator shall discontinue purchase of materials that are non-compliant with the VOC limits in Tables 336-1 through 336-7 of this rule. For materials that are subject to a lower VOC limit upon adoption of this rule, the owner or operator may continue to use supplies of non-compliant materials purchased prior to September 1, 2021 until March 1, 2022.~~

## SECTION 500 – MONITORING AND RECORDS

**501 RECORDKEEPING AND REPORTING:** An owner or operator shall comply with the following recordkeeping requirements:

- 501.1** Records shall be retained for five years and shall be made available to the Control Officer without delay upon verbal or written request.
- 501.2 Current Lists:** Maintain a current list of coatings, industrial adhesives, industrial adhesive primers, cleaning materials or any other VOC-containing materials regulated by this rule. The list:
  - a. Shall express VOC content in one of the following forms:
    - (1) Pounds VOC per gallon;
    - (2) Grams VOC per liter; or

- (3) The percent VOC by weight along with the specific gravity or density.
- b. Shall have the written value of the VOC coating content, in one of the following forms. The documentation must provide accurate VOC content values or be based on enforceable test methods as approved by the Administrator to determine the VOC content.
  - (1) A manufacturer's technical data sheet;
  - (2) A manufacturer's safety data sheet (SDS or MSDS); or
  - (3) Actual test results.
- c. Shall ~~maintain~~ include usage or purchase records as follows:
  - (1) **Monthly:** Records of the amount of VOC-containing materials purchased or used shall be totaled by the end of the month for the previous month. This includes, but is not limited to, all coating materials, all industrial adhesives, all industrial adhesive primers, all materials added during preparation of coatings or adhesives, all materials used to clean coating application equipment, and all materials used to clean coating application areas.
  - (2) **Grouping by VOC Content:** For purposes of recording usage, an owner or operator may give VOC coatings, cleaners, and solvents of similar VOC content (VOC Regulatory) a single group-name, distinct from any product names in the group. The total usage of all the products in that group is then recorded under just one name. In such a case, the owner or operator must also keep a separate list that identifies the product names of the particular ~~solvents~~ VOC-containing materials included under the group name. To the group name shall be assigned the highest VOC content (VOC Regulatory) among the members of that group, rounded to the nearest tenth of a pound of VOC per gallon of material or to the nearest gram VOC per liter of material.
- d. Shall make the following listings for all coatings materials that have VOC limits listed in Tables 336-1 through 336-7 of this rule:
  - (1) **VOC Before Reducing:** The VOC content of each coating, industrial adhesive, and industrial adhesive primer as received, ~~minus exempt compounds. List the manufacturer's final VOC content as mixed in the proportions specified by the manufacturer.~~
  - (2) **List Maximum VOC Content of Coating as Applied:** For each coating, industrial adhesive, and industrial adhesive primer that is thinned/reduced or to which additive is introduced, record in a permanent log the VOC content; (VOC Regulatory) after mixing the maximum amount of thinner/reducer and other additives, ~~as determined by the formula in the definition of VOC Regulatory of this rule.~~ This log will include the following:
    - (a) The maximum number of fluid ounces thinner/reducer added to a gallon of unreduced coating, unreduced industrial adhesive, or unreduced industrial adhesive primer (or maximum g/liter) and the

maximum fluid ounces of every other additive mixed into a gallon of the coating, industrial adhesive, or industrial adhesive primer; or

(b) The VOC content (VOC Regulatory) of the coating, industrial adhesive, or industrial adhesive primer after adding the maximum amount of thinner/reducer and other additives ~~as determined by the formula in the definition of VOC Regulatory in this rule.~~

e. Shall ~~maintain~~ include usage or purchase records for aerosol can spray coating, including VOC content.

**502 ECS RECORDING REQUIREMENTS:** An owner or operator shall maintain all of the following records in accordance with an approved O&M Plan for any ECS:

**502.1** On each day an ECS is used at a facility pursuant to this rule, the owner or operator shall make a permanent record of the key system operating parameters as required by the O&M Plan including, but not limited to, the following:

- a. Flow rates;
- b. Pressure drops;
- c. Temperature; or
- d. Other operating conditions necessary to determine if the approved ECS is functioning properly.

**502.2** An explanation shall be recorded for periods of time an approved ECS is not operating.

**502.3** For each day or period the O & M Plan requires maintenance, the owner or operator shall make a permanent record of the maintenance actions taken within 24 hours of the maintenance completion.

**502.4** Corrective action taken, if any.

**502.5** An explanation shall be entered for scheduled maintenance that is not performed during the period designated for it in the O&M Plan.

**503 COMPLIANCE DETERMINATION AND TEST METHODS:**

**503.1 Compliance Determination:** ~~The following means shall be used to determine compliance with this rule:~~

a. ~~Measurement of VOC content~~ VOC regulatory of materials subject to Section 301 or Section 302 of this rule, ~~excluding reactive industrial adhesives, shall be conducted and reported using one of the following means shall be determined using one of the following methods and shall be reported on the manufacturer's technical data sheet, the manufacturer's safety data sheet, or on an analytical report from an accredited laboratory:~~

- (1) ~~VOC content of coatings, solvents, and other substances having less than 5% solids will be determined by the test method in Sections 503.2(f) of this rule (BAAQMD Method 31 [April 15, 1992]) or 503.2(g) (SCAQMD Method 313-91 [April 1997]) of this rule. The method in Section 503.2(c) of this rule (EPA Method 24);~~

(2) ~~The VOC content of coatings or other materials having 5% or more solids will be determined by the test method in Sections 503.2(c) (EPA Method 24), 503.2(f) (BAAQMD Method 31 [April 15, 1992]) or 503.2(g) (SCAQMD Method 313-91 [April 1997]) of this rule. The method in Section 503.2(g) of this rule (SCAQMD Method 313-91); or~~

~~(a) Platisols, powder coatings, and radiation-cured coatings shall be cured according to the procedures actually used in the coating process being tested before final VOC-emission determinations are made.~~

~~(b) In the case of multi-component, polymerizing coatings tested according to Section 503.1(a) of this rule, Method 24 shall be modified to eliminate the post-mixing dilution step (that employs toluene or other solvent). Instead, the mixture shall be spread by appropriate technique to form a thin layer, occupying the entire bottom of the foil pan. Techniques included in the method referenced in Section 503.1(b) of this rule can be used as a guide for such spreading.~~

(3) The method in Section 503.2(f) of this rule (SCAQMD Method 304-91).

b. VOC regulatory of reactive industrial adhesives subject to Section 301 or 302 of this rule, shall be measured using the method in Appendix A of the NESHAP for Surface Coating of Plastic Parts and Products (40 CFR 63, Subpart PPPP) and shall be reported on the manufacturer's technical data sheet, the manufacturer's safety data sheet, or on an analytical report from an accredited laboratory.

c. An owner or operator that complies with Section 301 or 302 of this rule using an ECS shall demonstrate compliance using the following methods and equations:

(1) Overall ECS Efficiency shall be determined using the following equation:

$$\text{Eff}_O = (\text{Eff}_{Co} \times \text{Eff}_{Ca}) / 100$$

where,

Eff<sub>O</sub> = overall ECS efficiency expressed as a percentage;

Eff<sub>Co</sub> = ECS control efficiency expressed as a percentage; and

Eff<sub>Ca</sub> = ECS capture efficiency expressed as a percentage.

b. ~~(2) The ECS control efficiency shall be determined by measuring the VOC content of gaseous emissions entering and exiting an the ECS shall be determined by either using the method in Section 503.2(b) of this rule (EPA Method 18) referred to in Section 503.2(b) of this rule, or one of the methods in Section 503.2(d) of this rule (EPA Method 25, 25a, or 25b) and its submethod, referred to in Section 503.2(d) of this rule.~~

e. ~~(3) Capture efficiency of an ECS~~ The ECS capture efficiency shall be determined either by using one of the methods in Section 503.2(e) of this rule (EPA Method 204, 204a, 204b, 204c, 204d, 204e, or 204f and its submethods) and EPA's "Guidelines for Determining Capture Efficiency (January 9, 1995)", or by using mass balance calculation methods in concert

in combination with ventilation/draft rate determinations made using one of with the methods in Section 503.2(a) of this rule (EPA Methods 2, 2a, 2c, and or 2d).

- d. Measurement of air pressure at the center of the spray gun tip of an air-atomizing spray gun shall be performed using an attachable device ~~in proper working order~~ supplied by the gun's manufacturer for performing such a measurement. The device supplied by the gun's manufacturer shall be in proper working order and kept on-site at the location where the gun is used.
- e. Temperature measurements shall be done ~~with using~~ an instrument ~~with an accuracy and precision of less than one-half degree Fahrenheit~~ that is accurate to within 0.5°F (0.25°C) for temperatures up to 480°F (250°C).

**503.2 Compliance Determination-Test Methods Incorporated by Reference:** The following test methods are approved for use for the purpose of determining compliance with this rule. The test methods are incorporated by reference in Appendix G of the Maricopa County Air Pollution Control Regulations. ~~Alternative test methods as approved by the Administrator or other EPA-~~ approved test methods may be used upon prior written approval from the Control Officer. When more than one test method is permitted for the same determination, an exceedance under any method will constitute a violation. Copies of test methods referenced in this section are available at the Maricopa County Air Quality Department.

- a. EPA Methods 2 (“Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)”), 2a (“Direct Measurement of Gas Volume Through Pipes and Small Ducts”), 2c (“Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)”), and 2d (“Measurement of Gas ~~volumetric~~ Volume Flow Rates in Small Pipes and Ducts”). ~~All 4 of the foregoing methods are in~~ (40 CFR 60, Appendix A).
- b. EPA Method 18 (“Measurement of Gaseous Organic Compound Emissions by Gas Chromatography”) ~~and its submethods~~ (40 CFR 60, Appendix A).
- c. EPA Test Method 24 (“Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings”) (40 CFR 60, Appendix A).
- d. EPA Method 25 (“Determination of Total Gaseous Non-methane Organic Emissions as Carbon”), 25a (“Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer”), and 25b (“Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer”) ~~and its submethods~~ (40 CFR 60, Appendix A).
- e. EPA Test Methods 204 (“Criteria for and Verification of a Permanent or Temporary Total Enclosure”), 204a (“Volatile Organic Compounds Content in Liquid Input Stream”), 204b (“Volatile Organic Compound Emissions in Captured Stream”), 204c (“Volatile Organic Compound Emissions in Captured Stream (Dilution Technique)”), 204d (“Volatile Organic Compound Emissions in Uncaptured Stream from Temporary Total Enclosure”), 204e (“Volatile Organic Compound Emissions in Uncaptured Stream from Building

Enclosure”), and 204f (“Volatile Organic Compounds Content in Liquid Input Stream (Distillation Approach)”) (Appendix M, 40 CFR 51, Appendix M).

- f. California’s Bay Area Air Quality Management District (BAAQMD) Method 31 (April 15, 1992), “Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings.” California’s South Coast Air Quality Management District (SCAQMD) Method 304-91 (February 1996).
- g. California’s South Coast Air Quality Management District (SCAQMD) Method 313-91 (April 1997) “Determination of Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometry (GC/MS)”.
- h. EPA Test Method for Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives (40 CFR 63, Subpart 63, Appendix A to Subpart PPPP).

503.3 ~~Test Methods for ECS: For coatings controlled pursuant to Section 305 of this rule:~~

- a. ~~Measurements of VOC emissions from an ECS shall be conducted in accordance with EPA Methods 18 or its submethods, or by Method 25 or its submethods (40 CFR 60, Appendix A).~~
- b. ~~Capture efficiency of an ECS shall be determined by mass balance in combination with ventilation/draft rate determinations done in accordance with Section 503.3(c) of this rule or with US EPA Test Methods 204, 204a, 204b, 204c, 204d, 204e, and 204f (Appendix M, 40 CFR 51).~~
- e. ~~Ventilation/draft rates shall be determined by EPA Methods 2, 2a, 2e, and 2d (40 CFR 60, Appendix A).~~