

RULE 245 SURFACE COATING OF METAL PARTS AND PRODUCTS

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100 GENERAL

101 PURPOSE: To limit the emission of volatile organic compounds from the application of coatings, coating removers (strippers), surface preparation materials, and cleanup materials in metal parts and products coating operations.

102 APPLICABILITY: The provisions of this rule apply only to facilities located in Placer County.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

104 EXEMPTIONS, LOW USAGE OF MATERIALS EXCEEDING VOC CONTENT LIMITS:

104.1 Low Usage of Non-Compliant Coating Materials: The provisions of this rule shall not apply to the VOC requirements of Sections 301 if (1) the total volume of such non-compliant coatings is less than 55 gallons per year, and (2) the requirements of Sections 401 and 501 are met.

105 EXEMPTIONS, SPECIFIC OPERATIONS AND COATINGS: Except for recordkeeping requirements as specified in Section 501, the requirements of this rule shall not apply to:

105.1 Coating of prefabricated architectural components or structures not coated in a shop environment and which are regulated by Rule 218, Architectural Coatings.

105.2 Motor vehicles including automotive, truck and heavy equipment which are regulated by Rule 234, Automotive Refinishing Operations.

105.3 Coating of metal cans, which is regulated by Rule 223, Metal Container Coating.

105.4 Adhesives and other materials which are regulated by Rule 235, Adhesives.

105.5 Polyester resin operations which is regulated by Rule 243, Polyester Resin Operations.

105.6 Coatings sold in non-refillable aerosol containers having a capacity of 1 liter (1.1 quarts), or less.

105.7 Powder coatings.

105.8 Partial exemptions:

105.8.1 Coating operations used for repair and touchup are only exempt from the application method requirements of Section 302.

105.8.2 Coating operations used for stencil, safety indicating, solid film lubricating, electric insulating, thermal conduction, and magnetic data storage, are only required to meet the recordkeeping requirements of Section 501 and work practice requirements of Section 304.

200 DEFINITIONS

201 ADHESIVE: Any substance that is used to bond one surface to another by attachment.

202 AEROSOL CONTAINER: A hand-held, nonrefillable container which expels pressurized product ingredients by means of a propellant-induced force.

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- 203 AEROSPACE VEHICLE:** The completed unit of any aircraft, helicopter, missile or space vehicle.
- 204 AIR-DRIED COATING:** Any coating which is not heated above 194°F (90°C) for the purpose of curing or drying.
- 205 ALUMINUM COATING FOR WINDOW FRAMES AND DOOR FRAMES:** A coating which is applied in a shop environment and is used to protect prefabricated aluminum window frames, window walls and door frames, and which is required to meet the specifications of Architectural Aluminum Manufacturers Association AAMA 605.2-1980.
- 206 APPLICATION EQUIPMENT:** A device used to apply coatings or used in preparing a coating material, such as stir sticks or funnels.
- 207 APPURTENANCES:** Accessories to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools and concrete forms.
- 208 BAKED COATING:** Any coating which is heated above 194°F (90°C) for the purpose of curing or drying.
- 209 CAMOUFLAGE COATING:** A coating applied as a topcoat on equipment to conceal such equipment from detection.
- 210 CLEANUP MATERIAL:** A VOC-containing material used to clean parts and application equipment used in miscellaneous metal parts and products coating operations.
- 211 CLOSED CONTAINER:** A container whose cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.
- 212 CAN COATING:** Any coating containing organic materials and applied or intended for application by spray, roller, or other means onto the interior and/or exterior of metal cans, drums, pails or lids.
- 213 COATING:** A material applied to a surface to identify, beautify, protect, convey a message, or minimize detection of such surface. Such materials include, but are not limited to paints, varnishes, sealers and stains.
- 214 COATING REMOVER:** (See STRIPPER, Section 265)
- 215 COILS:** Material sheets or strips which are rolled into coils for further industrial or commercial use.
- 216 CONFORMAL COATING:** A coating applied to electronic circuit boards or the assembled components for the purpose of moisture resistance, corrosion resistance, bacteria resistance, or fungi resistance.
- 217 CURED MATERIAL:** An adhesive, coating or ink that is dry to the touch.
- 218 DIP COAT:** A coating method which is applied by dipping an object into a vat of coating material, and allowing any excess coating material to drain off.
- 219 ELECTRICAL INSULATING COATING:** A coating which is applied to electrical components expressly for the purpose of electrical insulation.
- 220 ELECTRICAL INSULATING VARNISH:** A varnish coating which is applied to electrical components.

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- 221 ELECTROCOATING:** A process that uses coating concentrates or pastes added to a water bath. The coating is applied by using an electrical current in either an anodic or cathodic process.
- 222 ELECTROSTATIC APPLICATION:** A process that applies coating particles or coating droplets to a grounded substrate by electrically charging them.
- 223 ENCLOSED GUN WASHER:** A spray gun washing system that has an enclosed solvent container, and which uses non-atomized solvent flow to flush the spray equipment and then collects and returns the discharged solvent to the enclosed container.
- 224 ETCHING FILLER:** A coating that contains less than 23 percent solids, by weight, and at least 0.5 percent acid by weight, and which is used instead of applying a pretreatment coating followed by a primer.
- 225 EXEMPT COMPOUNDS:** For a current listing of exempt compounds, see Rule 102, Definitions.
- 226 EXTREME HIGH GLOSS COATING:** A coating which, when tested in accordance with ASTM Test Method D-523-1989, has a reflectance of 85 percent or more on a 60⁰ meter.
- 227 EXTREME PERFORMANCE COATING:** A coating applied to a metal surface where the coated surface, in its intended use, is frequently or chronically exposed to any of the following:
- 227.1 Corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution.
 - 227.2 Repeated exposure to temperatures in excess of 250°F (121°C).
 - 227.3 Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents.
- 228 FLOW COAT:** A coating method which is applied by flowing a stream of coating over an object and allowing any excess material to drain.
- 229 HAND COATING:** The application of coatings by manually-held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers and sponges.
- 230 HAND LETTERING:** A method utilizing hand application equipment to add letters and/or numbers on a substrate:
- 231 HEAT-RESISTANT COATINGS:** A coating which is applied to a substrate that must withstand a temperature of at least 400°F (204°C) during normal use.
- 232 HIGH PERFORMANCE ARCHITECTURAL COATING:** A coating used to protect architectural subsections and which is required to meet the specifications of the Architectural Aluminum Manufacturer Association's publication number AAMA 605.2-1980.
- 233 HIGH TEMPERATURE COATING:** A coating applied to a substrate that must withstand a temperature of 1000°F (538°C) during normal use.
- 234 HIGH VOLUME, LOW PRESSURE (HVLP) APPLICATION EQUIPMENT:** Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, measured dynamically at the center of the air cap and at the air horns.

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- 235 IRIDESCENT COATING:** Any coating which contains more than 0.042 lb/gal (5.0 g/l) of iridescent particles, as applied, where such particles are visible in the dried film.
- 236 KEY SYSTEM OPERATING PARAMETER:** A variable that is critical to the operation of an emission control system and that ensures both operation of the system within the system manufacturer's specifications, and compliance with the overall system efficiency standard required by Section 304. Such variables may include, but are not limited to, hours of operation, temperature, flow rate and pressure.
- 237 LOW VOLUME, LOW PRESSURE (LVLP) APPLICATION EQUIPMENT:** Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, with air volume less than 15.5 cfm per spray gun, and which operates at a maximum fluid delivery pressure of 50 psig.
- 238 MAGNETIC DATA STORAGE DISC:** A flat film or plate with a magnetic coating on which digital information can be stored by selective magnetization of portions of the flat surface.
- 239 MAINTENANCE CLEANING:** The cleaning of tools, forms, molds, jigs, machinery and equipment, and the cleaning of work areas where maintenance or manufacturing occurs.
- 240 METAL PARTS AND PRODUCTS:** Any components or complete units fabricated from metal, except those subject to the provisions of other District source-specific rules.
- 241 METALLIC COATING:** A coating which contains more than 0.042 lb/gal (5.0 g/l) of metal particles, as applied, where such particles are visible in the dried film.
- 242 MILITARY SPECIFICATION:** A coating which has a formulation approved by a United States Military Agency for use on military equipment.
- 243 MOLD-SEAL COATING:** The initial coating applied to a new mold or repaired mold and associated tooling to provide a smooth surface which, when coated with a mold release material, prevents products from sticking to the mold or to the tooling.
- 244 MOTOR VEHICLE:** A passenger car, light duty truck, medium-duty vehicle, or heavy-duty vehicle as defined in Section 1902, Title 13, of the California Administrative Code.
- 245 MULTI-COMPONENT COATING:** A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.
- 246 NON-ABSORBENT CONTAINER:** A container made of non-porous material that does not allow the migration of solvents through the container.
- 247 NON-SKID COATING:** Any coating which has, as its primary purpose, the creation of traction to prevent slippage.
- 248 ONE-COMPONENT COATING:** A coating that is ready for application as it comes out of its container to form an acceptable dry film.
- 249 OPTICAL ANTI-REFLECTIVE COATING:** A coating with a low reflectance in the infrared and visible wavelength range, and is used for anti-reflection on or near optical and laser hardware.
- 250 PAN BACKING COATING:** A coating applied to the surfaces of pots or other cooking implements that are exposed directly to a flame or other heating elements.

- 251 PERFORMANCE TEST:** The application of coatings and the use of cleaning solvents at paint manufacturing facilities, while conducting tests on the materials to verify performance with the requirements of this rule.
- 252 POLYESTER RESIN MATERIALS:** Materials including, but not limited to, unsaturated polyester resins such as isophthalic, orthophthalic, halogenated, biphenol A, vinyl ester, furan resins, cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other VOC-containing materials in polyester resin coating operations.
- 253 POLYESTER RESIN OPERATIONS:** All mixing, pouring, forming, spraying and other production operations, including rework and cleanup activities.
- 254 POWDER COATING:** Any coating applied as a dry (without solvent or other carrier) finely divided solid, which when melted and fused, adheres to the substrate as a paint film.
- 255 PREFABRICATED ARCHITECTURAL COMPONENT:** Prefabricated metal parts and products which are to be used as architectural appurtenances or structures and which are coated in a shop environment, not including window frames and door frames.
- 256 PRETREATMENT WASH PRIMER:** A coating which contains no more than 12 percent solids (by weight) and at least 0.5 percent acid (by weight), and which is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.
- 257 REPAIR COATING:** A coating used to recoat portions of a product which has sustained mechanical damage to the coating following normal painting operations.
- 258 ROLL COATER:** A coating device that contains a series of mechanical rollers that apply a thin coating film onto the surface of a roller, which is then applied to a substrate by moving the substrate beneath the roller.
- 259 SAFETY- INDICATING COATING:** A coating which is formulated to produce a color change when it is exposed to an unsafe condition, such as a high temperature or an unsafe concentration of gas.
- 260 SILICONE RELEASE COATING:** A coating which contains silicone resin, and which is intended to prevent food from sticking to metal surfaces such as baking pans.
- 261 SOLAR-ABSORBENT COATING:** A coating which has as its prime purpose the absorption of solar radiation.
- 262 SOLID FILM LUBRICANT:** A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following materials: molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE), or other solid that acts as a dry lubricant between closely-fitting surfaces.
- 263 STATIONARY SOURCE:** Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as a fugitive emission.
- 263.1 "Building, structure, facility, or emission unit" includes all pollutant emitting activities which:
- 263.1.1 Belong to the same industrial grouping, and
- 263.1.2 Are located on one property or two or more contiguous properties, and
- 263.1.3 Are under the same common ownership, operation, or control, or which are owned or operated by entities which are under common control.

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- 263.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:
- 263.2.1 They belong to the same two-digit Standard Industrial Classification (SIC) code, or
- 263.2.2 They are part of a common production process, which includes industrial processes, manufacturing processes and any connected processes involving a common material.

- 264 STENCIL COATING:** A coating which is applied by a template or stamp in order to add designs, letters and/or numbers to the product.
- 265 STRIPPER (OR COATING REMOVER):** A material applied to the surface of any metal part or product to completely remove maskants, coatings or coating residues. A stripper is not a surface preparation material or cleanup material. Material used for the removal of overspray is not considered a coating remover.
- 266 SURFACE PREPARATION:** A process where a VOC-containing material is applied to the surface of any miscellaneous metal part or product to clean the substrate or to promote adhesion of subsequent coatings, prior to the application of those coatings.
- 267 TEXTURED FINISH:** A rough surface produced by spraying and splattering large drops of coating onto a previously applied coating. The coatings used to form the appearance of the textured finish are referred to as “textured coatings”.
- 268 TOUCH-UP COATING:** A coating used to cover minor coating imperfections appearing after the main coating operation.
- 269 TRANSFER EFFICIENCY:** The ratio of the weight or volume of coating solids adhering to an object, to the total weight or volume, respectively, of coating solids used in the application process, expressed as a percentage.
- 270 VACUUM-METALIZING COMPOUND:** The undercoat applied to the substrate on which the metal is deposited, or the overcoat applied directly to the metal film.
- 271 VOLATILE ORGANIC COMPOUND (VOC):** For the purposes of this rule, “volatile organic compound” has the same meaning as in Rule 102, Definitions.
- 272 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED:** For the purposes of this rule, “volatile organic compound as applied” means the VOC content including thinners, reducers, hardeners, retarders, catalysts and additives, calculated pursuant to Sections 403 or 404, as applicable.

300 STANDARDS

- 301 LIMITS: VOC CONTENT OF COATINGS FOR METAL PARTS AND PRODUCTS:** Except for materials and processes listed in Sections 104 or 105, no person shall apply any coatings to a metal part or product, or use VOC-containing solvents, if such materials have a VOC content exceeding the applicable limits specified in the following Table 1. The VOC content of coating materials shall be determined in accordance with Sections 403. The VOC content of solvents, strippers and cleanup materials, shall be determined in accordance with Sections 404.

Table 1 - VOC Content Limits for Coatings and Materials Used to Coat Metal Parts and Products

Coating or Material Type	VOC Limit, grams/liter (lb/gal), (Less water and exempt compounds)	
	Baked	Air-Dried
General (One Component)	275 (2.3)	275 (2.3)
General (Multi-Component)	275 (2.3)	340 (2.8)
Specialty Coatings		
Camouflage	360 (3.0)	420 (3.5)
Electric Insulating Varnish	420 (3.5)	420 (3.5)
Etching Filler	420 (3.5)	420 (3.5)
Extreme Performance	360 (3.0)	420 (3.5)
Extreme High Gloss	360 (3.0)	340 (2.8)
Heat Resistant	360 (3.0)	420 (3.5)
High Performance Architectural	420 (3.5)	420 (3.5)
High Temperature	420 (3.5)	420 (3.5)
Metallic and Iridescent Coating	360 (3.0)	420 (3.5)
Military Specification	275 (2.3)	340 (2.8)
Mold Seal Coating	420 (3.5)	420 (3.5)
Pan Backing Coating	420 (3.5)	420 (3.5)
Pretreatment Wash Primer	275 (2.3)	340 (2.8)
Prefabricated Architectural	275 (2.3)	420 (3.5)
Repair Coating	360 (3.0)	420 (3.5)
Silicone Release Coating	420 (3.5)	420 (3.5)
Solar Absorbent Coating	360 (3.0)	420 (3.5)
Touch-Up Coating	360 (3.0)	420 (3.5)
Vacuum Metalizing	420 (3.5)	420 (3.5)

302 APPLICATION METHODS: A person shall not apply coatings to metal parts and products subject to the provisions of this rule unless the coatings are applied using properly operated equipment, and by using either: one of the following application methods or any other high transfer efficiency application method which has been approved in advance, in writing, by the Air Pollution Control Officer and United States Environmental Protection Agency:

- 302.1 Electrostatic attraction, operated in accordance with manufacturer's recommendations.
- 302.2 High-Volume, Low-Pressure (HVLP) spray system operated in accordance with manufacturer's recommendations.
- 302.3 Low-Volume, Low-Pressure (LVLP) spray system operated in accordance with manufacturer's recommendations.
- 302.4 Flow Coat
- 302.5 Dip Coat
- 302.6 Hand Coat
- 302.7 Roll Coat

303 SURFACE PREPARATION AND CLEAN-UP REQUIREMENTS:

- 303.1 A person shall not use materials which have a VOC content in excess of 200 grams per liter (1.67 pounds/gallon) of material for stripping any coating governed by this rule.

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- 303.2 Before August 20, 2010, a person shall not perform product cleaning with any material containing VOC in excess of 72 grams per liter (0.6 pounds per gallon).
- 303.3 Before August 20, 2010, except for electrostatic spray guns, a person shall not use VOC-containing materials for the clean-up of equipment used in coating operations unless (1) the equipment is disassembled and cleaned in an enclosed gun washer, or (2) the VOC content of the cleaning material used does not exceed 72 grams per liter (0.6 pounds per gallon).
- 303.4 After August 20, 2010, a person shall not perform cleanup of application equipment (including spray gun nozzles), product cleaning, or surface preparation, with a material containing VOC in excess of 25 grams per liter (0.21 pounds per gallon).

304 WORK PRACTICE REQUIREMENTS:

- 304.1 Spillage of VOC-containing materials shall be minimized.
- 304.2 VOC-containing materials and used shop towels or sponges shall be stored and disposed of in closed containers. Storage and disposal containers must be kept closed, except when depositing or removing the materials. Disposal shall be conducted in a manner that the VOC are not emitted to the atmosphere.
- 304.3 VOC-containing materials shall be conveyed in closed containers or pipes.

305 EMISSION CONTROL EQUIPMENT: As an alternative to using materials that meet the VOC limits in Sections 301, a person may comply with the VOC provisions of this rule by using a District-approved emission control equipment system. Such compliance may be demonstrated by a system to capture and control emissions, which will reduce VOC emissions by at least 95% by weight.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION: No person shall require for use or specify the application of any coating subject to the provisions of this rule that does not meet the limits and requirements of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any metal parts or product at any physical location within the District.

402 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS: Any person who sells any coating, coating remover (stripper), surface preparation or cleanup material subject to this rule, shall provide the following information on material data sheets made available to the purchaser at the time of sale:

- 402.1 The material type by name/code/manufacturer.
- 402.2 For coating materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of coating, excluding water and exempt compounds, pursuant to Section 403.
- 402.3 For coating removers (strippers), surface preparation and cleanup materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of material, including water and exempt compounds, pursuant to Section 404.
- 402.4 For all materials, recommendations regarding thinning, reducing, or mixing with any VOC-containing material, as defined in Section 270.

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402.5 For all materials, VOC content may be calculated using product formulation data, or may be determined using the test method in Section 503.1.

403 DETERMINATION OF VOC CONTENT OF COATINGS, LESS WATER AND EXEMPT COMPOUNDS: The weight of VOC per combined volume of VOC and coating solids shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where: **G** = Weight of VOC per liter of coating, less water and exempt compounds

W_v = Weight of volatile compounds, in grams

W_w = Weight of water, in grams

W_{ec} = Weight of exempt compounds, in grams

V_m = Volume of coating material, in liters

V_w = Volume of water in liters

V_{ec} = Volume of exempt compounds, in liters.

404 DETERMINATION OF VOC CONTENT PER LITER OF COATING REMOVERS (STRIPPERS), SURFACE PREPARATION MATERIALS, AND CLEANUP MATERIALS: The weight (in grams) of VOC per liter of coating materials shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: **G** = Weight of VOC per total volume of material, in grams per liter.

W_v = Weight of all volatile compounds, in grams

W_w = Weight of water, in grams

W_{ec} = Weight of exempt compounds, in grams

V_m = Volume of coating material, including any added VOC-containing solvents or reducers, but excluding any colorants added to tint the base, in liters.

405 OPERATION AND MAINTENANCE PLAN: A person using an emission control system pursuant to Section 304, as a means of alternate compliance with this rule, must submit an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. A person proposing to install a new emission control as a means of alternate compliance with this rule shall submit in addition to an Operation and Maintenance Plan, an application for Authority to Construct, pursuant to Rule 501, General Permit Requirements. The plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emission-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Sections 501. The plan shall be implemented upon approval of the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any applicable record-keeping requirements of either Rule 502, New Source Review, Rule 507, Federal Operating Permit Program, Rule 511, Potential

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To Emit, or any other District Rule which might be applicable, any person applying coating products, surface preparation solvents, cleanup solvents, or strippers subject to any provision of this rule shall maintain the following records for non-exempt materials in order to evaluate compliance:

501.1 Product Data: A list of currently used coating products, surface preparation solvents, cleanup solvents or strippers subject to this rule. This list shall include all of the following data for each material used:

501.1.1 The material's manufacturer, product name and product number or code.

501.1.2 Classification according to the terminology used in Sections 301, 302 and 303. (e.g. "Extreme-Performance Coating", "Mold-Seal Coating", "Stripper", etc.).

501.1.3 The material's VOC content as applied, determined according to Sections 403 and 404, when used in the mixing ratios recommended by the manufacturer.

501.1.4 The actual mixing ratio, if different from the manufacturer's recommendation, used in applying the material.

501.2 Product Usage and Frequency: Any person using materials regulated by this rule shall record and maintain records of the volume used per month of each individual material as listed pursuant to Section 501.1.

501.3 Emission Control Equipment Records:

501.3.1 A person using emission control equipment as a means of alternate compliance pursuant to Section 304, shall maintain records on a daily basis, showing the type and volume of coatings and solvents used.

501.3.2 A person using emission control equipment as a means of alternate compliance with this rule pursuant to Section 304, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 304, and as defined in Section 235.

501.4 Retention of Records: All records required by this rule shall be retained for at least three years, except for sources subject to Rule 507, Federal Operating Permit Program, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer, upon request.

502 VOC EMISSION THRESHOLD: If VOC emissions for any calendar year exceed 10,000 pounds, additional recordkeeping documentation will be required per Rule 511, Potential To Emit.

503 TEST METHODS:

503.1 Determination of VOC Content: VOC content of coatings, solvents, strippers and surface preparation materials shall be determined in accordance with United States Environmental Protection Agency (USEPA) Method 24 or Method 24A.

503.2 Determination of Compounds Exempt From VOC Definition: Exempt compounds referenced in Section 224 and listed in Rule 102, Definitions, shall be determined in accordance with ASTM D 4457-85 "Standard Test Method for Determination of

Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph” or California Air Resources Board Method 432 “Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings”. If any perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present and the USEPA-approved test method used to make the determination of these compounds.

- 503.3 Determination of Control Efficiency: Control efficiency of emissions control equipment referenced in Section 304, shall be determined in accordance with USEPA Method 25 or 25A: and USEPA Method 2 or 2C (whichever is applicable). USEPA Method 18 or CARB Method 422 “Determination of Volatile Organic Compounds in Emissions from Stationary Sources” may be used to determine emissions of exempt compounds.
- 503.4 Determination of Collection Efficiency: Collection efficiency of the control equipment referenced in Section 304 shall be determined in accordance with U.S.EPA’s “Guidelines for Determining Capture Efficiency, January 9, 1995”. Individual collection efficiency test runs subject to the U.S.EPA’s technical guidelines shall be determined by:
- 503.4.1 40 CFR 51, Appendix M, Methods 204-204F; or
- 503.4.2 The South Coast AQMD “Protocol for Determination of Volatile Organic Compound (VOC) Capture Efficiency”; or
- 503.4.3 Any other method approved by the USEPA, the California Air Resources Board, and the Air Pollution Control Officer.
- 503.5 Metallic/Iridescent Topcoat: The determination of a coating as metallic/iridescent shall be made using the South Coast Air Quality Management District “Spectrographic Method for the Analysis of Carbon Dust and Carbon Laminates, December 1985”.
- 503.6 Acid Content: The acid content of pretreatment wash primers shall be measured and reported in accordance with South Coast Air Quality Management District “Laboratory Methods for Analysis for Enforcement Samples”, and ASTM D1613-06 “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products”.
- 503.7 Emissions From Spray Gun Cleaning Systems: Determination of emissions of VOC from spray gun cleaning systems shall be made using South Coast Air Quality Management District “General Method for Determining Solvent Losses From Spray Gun Cleaning Systems”, October 1989.
- 503.8 Transfer Efficiency: Determination of transfer efficiency shall be made using South Coast Air Quality Management District Test Method “Spray Equipment Transfer Efficiency Test Procedure for Equipment Users”, May 24, 1989.
- 503.9 Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

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