

**RULE 459 AUTOMOTIVE, MOBILE EQUIPMENT, AND ASSOCIATED PARTS AND COMPONENTS
COATING OPERATIONS**

Adopted 12-7-95

(Amended 3-7-96, 9-5-96, 10-2-97, 8-25-11)

(Republished 2-29-12)

INDEX**100 GENERAL**

- 101 PURPOSE
- 102 APPLICABILITY
- 110 EXEMPTION, AEROSOL COATING PRODUCT
- 111 EXEMPTION, APPLICATION METHODS
- 112 EXEMPTION, ASSEMBLY LINE
- 113 EXEMPTION, TOUCH-UP
- 114 EXEMPTION, MATERIALS FOR VEHICLES
- 115 SEVERABILITY

200 DEFINITIONS

- 201 ADHESION PROMOTER
- 202 AEROSOL COATING PRODUCT
- 203 APPLICATION EQUIPMENT
- 204 ASSEMBLY LINE
- 205 ASSOCIATED PARTS AND COMPONENTS
- 206 AUTOMOTIVE COATING
- 207 AUTOMOTIVE COATING COMPONENT
- 208 AUTOMOTIVE COATING FACILITY
- 209 BUSINESS MACHINE PLASTIC PART
- 210 CAVITY WAX
- 211 CLEANING OPERATIONS
- 212 CLEAR COATING
- 213 CLOSED CONTAINER
- 214 COATING
- 215 COATING REMOVER (STRIPPER)
- 216 COLOR COATING
- 217 DEADENER
- 218 ELECTROSTATIC SPRAY APPLICATION
- 219 EMISSION CONTROL SYSTEM
- 220 END USER
- 221 EXEMPT COMPOUND
- 222 GASKET/GASKET SEALING MATERIAL
- 223 GRAPHIC ARTS OPERATION
- 224 HIGH-VOLUME, LOW-PRESSURE (HVLP) EQUIPMENT
- 225 LOW-VOLUME, LOW-PRESSURE (LVLP) EQUIPMENT
- 226 LUBRICATING WAX/COMPOUND
- 227 METALLIC/IRIDESCENT COLOR COATING
- 228 MISCELLANEOUS PLASTIC PARTS AND PRODUCTS
- 229 MOBILE EQUIPMENT
- 230 MOTOR VEHICLE
- 231 MULTI-COLOR COATING
- 232 ORIGINAL EQUIPMENT MANUFACTURING PLANT
- 233 PERMANENTLY LABELED
- 234 PLEASURE CRAFT
- 235 PRETREATMENT COATING
- 236 PRIMER
- 237 PRIMER SEALER
- 238 SINGLE-STAGE COATING

- 239 SOLVENT
- 240 SPOT REPAIR
- 241 SPRAY BOOTH
- 242 STATIONARY SOURCE
- 243 TEMPORARY PROTECTIVE COATING
- 244 TRANSFER EFFICIENCY
- 245 TRANSPORTATION PLASTIC PART
- 246 TRUCK BED LINER COATING
- 247 UNDERBODY COATING
- 248 UNIFORM FINISH COATING
- 249 VENDOR
- 250 VOLATILE ORGANIC COMPOUND (VOC)
- 251 VOLATILE ORGANIC COMPOUND AS APPLIED

300 STANDARDS

- 301 VEHICLE COATING LIMITS, PHASE II
- 302 VEHICLE MATERIAL LIMITS
- 303 MOST RESTRICTIVE VOC LIMIT
- 304 EMISSIONS CONTROL EQUIPMENT
- 305 APPLICATION EQUIPMENT REQUIREMENT
- 306 PROHIBITION OF SPECIFICATION
- 307 PROHIBITION OF SALE OR MANUFACTURE
- 308 PROHIBITION OF POSSESSION
- 309 SOLVENT CLEANING OPERATIONS AND STORAGE REQUIREMENTS
- 310 COATING REMOVER (STRIPPER) REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS

- 401 PRODUCT DATA SHEET REQUIREMENTS
- 402 LABELING REQUIREMENTS
- 403 OPERATION AND MAINTENANCE PLAN
- 404 PROCEDURE FOR PROCESSING OPERATION AND MAINTENANCE PLAN
- 405 DETERMINATION OF VOLATILE ORGANIC COMPOUND MASS EMISSION RATE AND PERCENT CONTROL EFFICIENCY
- 406 DETERMINATION OF OVERALL SYSTEM EFFICIENCY
- 407 DETERMINATION OF VOLATILE ORGANIC COMPOUNDS REGULATORY CONTENT OF A COATING, LESS WATER AND EXEMPT COMPOUNDS (VOC REGULATORY)
- 408 DETERMINATION OF VOLATILE ORGANIC COMPOUNDS ACTUAL CONTENT OF A COATING (VOC ACTUAL)
- 409 DETERMINATION OF VOLATILE ORGANIC COMPOUNDS ACTUAL CONTENT OF COATING REMOVERS (STRIPPERS) AND SOLVENTS

500 MONITORING AND RECORDS

- 501 RECORDKEEPING FOR PROHIBITION OF SALE OR MANUFACTURE
- 502 RECORDKEEPING FOR END USERS
- 503 DURATION OF RECORDS
- 504 TEST METHODS

100 GENERAL

- 101 **PURPOSE:** To limit the emission of volatile organic compounds into the atmosphere from coatings and solvents associated with the coating of motor vehicles, mobile equipment and associated parts and components.
- 102 **APPLICABILITY:** The provisions of this rule shall apply to any person who supplies, sells, offers for sale, manufactures, or distributes any automotive coating or associated solvent for use within the District, as well as any person who uses, applies, or solicits the use or application of any automotive coating or associated solvent within the District. The provisions of Rule 441, Organic Solvents, shall not apply to persons using automotive coatings and solvents subject to this rule.
- 110 **EXEMPTION, AEROSOL COATING PRODUCT:** The requirements of this rule shall not apply to any aerosol coating product.
- 111 **EXEMPTION, APPLICATION METHODS:** The requirements of Section 305 of this rule shall not apply to the application of any coating use of no more than one fluid ounce when applied from a container with a capacity of no more than one fluid ounce, of underbody coatings, truck bed liner coatings, or graphic arts operations.
- 112 **EXEMPTION, ASSEMBLY LINE:** The requirements of this rule shall not apply to any coating applied to motor vehicles or mobile equipment, or their associated parts and components, during manufacture on an assembly line at an original equipment manufacturing plant.
- 113 **EXEMPTION, TOUCH-UP:** The provisions of this rule shall not apply to any automotive coating that is sold, supplied, or offered for sale in containers of 0.5 fluid ounce or less intended to be used by the general public to repair tiny surface imperfections.
- 114 **EXEMPTION, MATERIALS FOR VEHICLES:** The requirements of Section 302 shall not apply to any motor vehicle, mobile equipment, or associated parts and components coating operations at a stationary source with actual emissions less than 2.7 tons of VOC per 12-month rolling period prior to emissions control equipment from the total of all of the following coatings and coating operations:
- 114.1 Truck bed liner coatings and underbody coatings subject to Section 301;
 - 114.2 Vehicle materials subject to Section 302;
 - 114.3 Coating operations for miscellaneous metal parts and products as defined in Rule 451 – SURFACE COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS; and
 - 114.4
 - a. Effective prior to the adoption of Rule 468 – SURFACE COATING OF MISCELLANEOUS PLASTIC PARTS AND PRODUCTS, BUSINESS MACHINE AND TRANSPORTATION PLASTIC PARTS, AND PLEASURE CRAFT, coating operations for miscellaneous plastic parts and products, transportation and business machine plastic parts, and pleasure craft as defined in Sections 209, 228, 234, and 245. (This section will sunset upon adoption of Rule 468).
 - b. Effective upon adoption of Rule 468, coating operations for miscellaneous plastic parts and products, transportation and business machine plastic parts, and pleasure craft as defined in Rule 468 – SURFACE COATING OF MISCELLANEOUS PLASTIC PARTS AND PRODUCTS, BUSINESS MACHINE AND TRANSPORTATION PLASTIC PARTS, AND PLEASURE CRAFT.
- 115 **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, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

200 DEFINITIONS

- 201 **ADHESION PROMOTER:** Any coating which is labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent coatings, and on which, a subsequent coating is applied.
- 202 **AEROSOL COATING PRODUCT:** A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications.
- 203 **APPLICATION EQUIPMENT:** Any device used to apply coatings or used in preparing a coating material for application such as stir sticks or funnels.
- 204 **ASSEMBLY LINE:** An arrangement of industrial equipment and workers in which the product passes from one specialized operation to another until complete, by either automatic or manual means.
- 205 **ASSOCIATED PARTS AND COMPONENTS:** Any structures, devices, pieces, modules, sections, assemblies, subassemblies, or elements of motor vehicles or mobile equipment that are designed to be part of motor vehicles or mobile equipment but which are not attached to motor vehicles or mobile equipment at the time of coating the structure, device, module, section, assembly, subassembly, or element. Associated parts and components do not include circuit boards. Some examples include truck trailers, radiators, engine blocks, and camper shells.
- 206 **AUTOMOTIVE COATING:** Any coating or coating component used or recommended for use in motor vehicle or mobile equipment coating, service, maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive coating or refinishing made by a person on the container or in product literature constitutes a recommendation for use in motor vehicle or mobile equipment coating. For the purposes of this rule, motor vehicle materials listed in Section 302 are considered to be coatings.
- 207 **AUTOMOTIVE COATING COMPONENT:** Any portion of a coating, including, but not limited to, a reducer or thinner, toner, hardener, and additive, which is recommended by any person to distributors or end-users for use in an automotive coating, or which is supplied for or used in an automotive coating. The raw materials used to produce the components are not considered automotive coating components.
- 208 **AUTOMOTIVE COATING FACILITY:** Any shop, business, location, or parcel of land where complete and incomplete motor vehicles or mobile equipment or their associated parts and components are coated.
- 209 **BUSINESS MACHINE PLASTIC PART:** A plastic part of 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, including devices listed in standard industrial classification numbers 3572, 3573, 3574, 3579, and 3661 and photocopy machines, a subcategory of standard industrial classification number 3861. (This definition will sunset upon adoption of Rule 468).
- 210 **CAVITY WAX:** A material or coating applied into cavities of the vehicle primarily for the purpose of enhancing corrosion protection.
- 211 **CLEANING OPERATIONS:** The removal of loosely held uncured adhesives, inks, coatings, or contaminants, including, but not limited to, dirt, soil, or grease, from motor vehicles, mobile equipment, associated parts and components, substrates, parts, products, tools, machinery, equipment (including application equipment) or general work areas.

- 212 **CLEAR COATING:** Any coating that contains no pigments and is labeled and formulated for application over a color coating or clear coating.
- 213 **CLOSED CONTAINER:** A container which has a cover where the cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.
- 214 **COATING:** Any material which is applied to a surface and forms a film in order to beautify, preserve, repair, or protect such a surface.
- 215 **COATING REMOVER (STRIPPER):** A material applied to the surface to completely remove maskants, coatings or coating residues. A coating remover (stripper) is not a solvent. Material used for the removal of overspray or to clean application equipment is considered a solvent, not a coating remover.
- 216 **COLOR COATING:** Any pigmented coating, excluding adhesion promoters, primers, and multi-color coatings, that requires a subsequent clear coating and which is applied over a primer, adhesion promoter, or color coating. Color coatings include metallic/iridescent color coatings.
- 217 **DEADENER:** A material or coating applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.
- 218 **ELECTROSTATIC SPRAY APPLICATION:** Any method of spray application of coatings where an electrostatic attraction is created between the part to be coated and the paint particles.
- 219 **EMISSION CONTROL SYSTEM:** Any combination of capture systems and control devices used to reduce VOC emissions from automotive coating operations.
- 220 **END USER:** Any person using or applying any coating, coating remover (stripper), or solvent subject to this rule.
- 221 **EXEMPT COMPOUND:** For the purposes of this rule, "exempt compound" has the same meaning as in Rule 101—GENERAL PROVISIONS AND DEFINITIONS.
- 222 **GASKET/GASKET SEALING MATERIAL:** Any fluid applied to coat a gasket or replace and perform the same function as a gasket including room temperature vulcanization seal material.
- 223 **GRAPHIC ARTS OPERATION:** The application of logos, letters, numbers, or graphics to a painted surface by brush, roller, or airbrush.
- 224 **HIGH-VOLUME, LOW-PRESSURE (HVLP) EQUIPMENT:** Spray equipment which is designed and operated between 0.1 and 10 pounds per square inch, gauge (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.
- 225 **LOW-VOLUME, LOW-PRESSURE (LVLP) EQUIPMENT:** Spray coating application equipment with air pressure between 0.1 and 10 pounds per square inch gauge (psig) and air volume less than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 50 psig.
- 226 **LUBRICATING WAX/COMPOUND:** Any protective lubricating material applied to vehicle hubs and hinges.
- 227 **METALLIC/IRIDESCENT COLOR COATING:** Any coating that contains more than 5 g/l (0.042 lb/gal) of metal or iridescent particles, as applied, where such particles are visible in the dried film.

- 228 **MISCELLANEOUS PLASTIC PARTS AND PRODUCTS:** Any parts or products constructed either entirely or partially from plastic that are not defined as transportation plastic parts, business machine plastic parts, or parts of a pleasure craft, including but not limited to, molded plastic parts, industrial and household products, plumbing and marine parts or products, sporting goods, toys, and other consumer products. (This definition will sunset upon adoption of Rule 468).
- 229 **MOBILE EQUIPMENT:** Any device that may be drawn and/or driven on rails or a roadway including, but not limited to, trains, railcars, truck trailers, mobile cranes, bulldozers, street cleaners, portable generators, and agricultural equipment.
- 230 **MOTOR VEHICLE:** Any self-propelled vehicle, including, but not limited to, cars, trucks, buses, golf carts, vans, motorcycles, tanks, and armored personnel carriers.
- 231 **MULTI-COLOR COATING:** Any coating that exhibits more than one color in the dried film after a single application, is packaged in a single container, and hides surface defects on areas of heavy use, and which is applied over a primer or adhesion promoter.
- 232 **ORIGINAL EQUIPMENT MANUFACTURING PLANT:** A facility where new motor vehicle or new mobile equipment is completely assembled, including coating of new motor vehicles or new mobile equipment or their associated parts and components.
- 233 **PERMANENTLY LABELED:** Spray equipment labeled by the manufacturer such that the end user cannot alter it. Permanent labeling is in the form of engraved markings or a plate permanently attached to the spray equipment.
- 234 **PLEASURE CRAFT:** A vessel which is manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a person or business for recreational purposes. The owner or operator of such a vessel shall be responsible for certifying that the intended use is for recreational purposes. (This definition will sunset upon adoption of Rule 468).
- 235 **PRETREATMENT COATING:** Any coating which contains a minimum of 0.5 percent acid by weight and not more than 16 percent solids by weight necessary to provide surface etching and is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.
- 236 **PRIMER:** Any coating which is labeled and formulated for application to a substrate to provide: a bond between the substrate and subsequent coats; corrosion resistance; a smooth substrate surface; or resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.
- 237 **PRIMER SEALER:** Any coating which is labeled and formulated for application prior to the application of a color coating for the purpose of color uniformity, or to promote the ability of the underlying coating to resist penetration by the color coating.
- 238 **SINGLE-STAGE COATING:** Any pigmented coating, excluding primers, primer sealers, and multi-color coatings, labeled and formulated for application without a subsequent clear coat. Single-stage coatings include single-stage metallic/iridescent coatings.
- 239 **SOLVENT:** A VOC-containing fluid used to perform cleaning operations.
- 240 **SPOT REPAIR:** Repair of an area on a motor vehicle, piece of mobile equipment, or associated parts or components of less than 1 square foot (929 square centimeters).
- 241 **SPRAY BOOTH:** An enclosure, within which coatings are applied, that has a full roof and four complete walls and is ventilated so that air is drawn into one or more stacks and exhausted vertically through the top and outside of a building.

- 242 **STATIONARY SOURCE:** Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as a fugitive emission.
- 242.1 Building, structure, facility, or emissions unit includes all pollutant emitting activities which:
- belong to the same industrial grouping, and
 - are located on one property or on two or more contiguous properties, and
 - are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.
- 242.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:
- they belong to the same two-digit standard industrial classification code, or
 - they are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)
- 242.3 The emissions within District boundaries of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from cargo carriers are proposed as emission offsets.
- 243 **TEMPORARY PROTECTIVE COATING:** Any coating formulated and labeled for the purpose of temporarily protecting areas from overspray or mechanical damage.
- 244 **TRANSFER EFFICIENCY:** The amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage.
- 245 **TRANSPORTATION PLASTIC PART:** Any interior or exterior plastic part or component manufactured at an original equipment manufacturing plant for motor vehicles or mobile equipment, excluding plastic parts for cars or motor vehicles designed to transport light loads of property with gross vehicle weight rating of 8,500 pounds or less. (This definition will sunset upon adoption of Rule 468).
- 246 **TRUCK BED LINER COATING:** Any coating, excluding clear, color, multi-color and single stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.
- 247 **UNDERBODY COATING:** Any coating labeled and formulated for application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.
- 248 **UNIFORM FINISH COATING:** Any coating formulated and labeled for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating.
- 249 **VENDOR:** A retail or wholesale distributor of automotive coating products.
- 250 **VOLATILE ORGANIC COMPOUND (VOC):** For the purposes of this rule, "volatile organic compound" has the same meaning as in Rule 101—GENERAL PROVISIONS AND DEFINITIONS. Tertiary butyl acetate is not considered a volatile organic compound for the purposes of complying with the standards specified in Section 301 when contained in an automotive coating or automotive coating component that is applied only within a spray booth.
- 251 **VOLATILE ORGANIC COMPOUND AS APPLIED:** For the purpose of this rule, volatile organic compound as applied means the volatile organic compound content including thinners, reducers, hardeners, retarders, catalysts and additives calculated pursuant to Sections 407, 408, or 409, as applicable.

300 STANDARDS

- 301 **VEHICLE COATING LIMITS, PHASE II:** No person shall apply to any motor vehicle, mobile equipment, or associated parts and components, any coating with a VOC regulatory content, as calculated pursuant to Section 407, in excess of the following limits:

COATING	VOC Regulatory Limit As Applied g/l (lbs/gal)
Adhesion Promoter	540 (4.5)
Clear Coating	250 (2.1)
Color Coating	420 (3.5)
Multi-color Coating: Mobile equipment driven or drawn on rails and its associated parts and components	520 (4.3)
Any other mobile equipment or motor vehicle and its associated parts and components	680 (5.7)
Pretreatment Coating	660 (5.5)
Primer/Primer Sealer	250 (2.1)
Single-Stage Coating	340 (2.8)
Temporary Protective Coating	60 (0.5)
Truck Bed Liner Coating	200 (1.7)
Underbody Coating	430 (3.6)
Uniform Finish Coating	540 (4.5)
Any Other Coating Type, Excluding Materials Listed in Section 302	250 (2.1)

- 302 **VEHICLE MATERIAL LIMITS:** No person shall apply to any motor vehicle any of the following materials with a VOC regulatory content, as calculated pursuant to Section 407, in excess of the following limits:

MATERIAL	VOC Regulatory Limit As Applied g/l (lbs/gal)
Gasket/Gasket Sealing Material	200 (1.7)
Cavity Wax	650 (5.4)
Deadener	650 (5.4)
Lubricating Wax/Compound	700 (5.8)

- 303 **MOST RESTRICTIVE VOC LIMIT:** If anywhere on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a person, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Section 301, then the lowest VOC content limit shall apply.

- 304 **EMISSIONS CONTROL EQUIPMENT:** As an alternative to the coating limits identified in Sections 301 or 302, as applicable, a person may use air pollution control equipment, subject to the approval of the Air Pollution Control Officer, that provides an overall system efficiency of not less than 85% as determined pursuant to Section 406. Any approved emission control equipment must be maintained and used at all times in proper working condition.
- 305 **APPLICATION EQUIPMENT REQUIREMENT:**
- 305.1 A person shall not apply any coating unless one of the following application methods is used:
- a. Electrostatic application equipment.
 - b. High-Volume Low-Pressure spray equipment. The spray gun shall meet one of the following:
 1. The spray gun shall be permanently labeled as a HVLP; or
 2. If the spray gun is not permanently labeled as a HVLP, then the end user shall demonstrate that the spray gun meets the HVLP definition in Section 224 in design and use. A satisfactory demonstration shall be based on the manufacturer's published technical material on the design of the gun and by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun.
 - c. Low-Volume Low-Pressure spray equipment.
 - d. Brush or roll coating, dip coat, or flow coat.
 - e. Any other application method that achieves a transfer efficiency equivalent to, or higher than, the application methods listed in Sections 305.1(a)-(d) as determined by the methods specified in Section 504.9. Written approval from the Air Pollution Control Officer shall be obtained for each alternative application method prior to use.
- 306 **PROHIBITION OF SPECIFICATION:** No person shall solicit or require the use of, or specify the application of a coating, coating remover (stripper) or solvent on a motor vehicle or mobile equipment or associated parts and components if such use or application is prohibited by any of the provisions of this rule. This prohibition shall apply to all written or oral contracts, including but not limited to, job orders, under the terms of which any coating that is subject to the provisions of this rule is to be used or applied at any physical location within the District. This prohibition shall not apply to coatings that meet the criteria specified in Section 307.2.
- 307 **PROHIBITION OF SALE OR MANUFACTURE:**
- 307.1 No person shall manufacture, blend, repackage for sale, supply, sell, solicit, or offer for sale, or distribute within the District any product (e.g., coating, coating remover (stripper) or solvent) if such product does not comply with any of the provisions of this rule.
- 307.2 Notwithstanding the provisions of Section 307.1, a person may manufacture, blend, repackage for sale, supply, sell, solicit, or offer for sale or distribute any product (e.g., coating, coating remover (stripper) or solvent) with a VOC content in excess of the limits specified in Sections 301, 302, 309, or 310 under the following circumstances, and provided all the requirements of Section 501 are also met:
- a. the product is for use exclusively within an emission control system as allowed in Section 304, or
 - b. the product is for use outside the District.
- 308 **PROHIBITION OF POSSESSION:** Any person shall not possess at any physical location within the District any containers containing coatings that are not in compliance with Section 301 or 302, as applicable. Any person shall not possess at any physical location within the District any containers containing coating removers (strippers) or solvents that are not in compliance with Sections 309 or 310, as applicable. This section shall apply only to end users (e.g., automotive coating facilities).

- 309 **SOLVENT CLEANING OPERATIONS AND STORAGE REQUIREMENTS:** Any person subject to this rule shall comply with the following requirements:
- 309.1 Closed containers shall be used for the disposal of cloth, sponges, or paper used for solvent cleaning operations and coating removal.
 - 309.2 Volatile organic compound-containing materials shall be stored in closed, vapor-tight containers, when not in use except while adding to or removing them from the containers.
 - 309.3 A person shall not perform cleaning operations using a solvent with a volatile organic compound content in excess of 25 grams per liter (0.21 pounds per gallon), as determined pursuant to Section 409.
 - 309.4 For bug and tar removal, a person shall not use any solvent other than bug and tar remover regulated under the Consumer Products Regulation (California Code of Regulations Section 94507 et seq.) or a solvent with a volatile organic compound content of no more than 25 grams per liter.
- 310 **COATING REMOVER (STRIPPER) REQUIREMENTS:** A person shall not perform coating removal with a material containing volatile organic compounds in excess of 200 grams per liter (1.7 pounds per gallon).

400 ADMINISTRATIVE REQUIREMENTS

- 401 **PRODUCT DATA SHEET REQUIREMENTS:** The manufacturer and repackager of any coating and coating component subject to Section 301, coating remover (stripper) subject to Section 310, or solvent subject to Section 309 shall include the following information on product data sheets:
- 401.1 **For coatings and coating components subject to Section 301:**
 - a. The volatile organic compound regulatory content for coatings expressed in grams per liter, calculated pursuant to Section 407.
 - b. The volatile organic compound actual content for coatings expressed in grams per liter, calculated pursuant to Section 408.
 - c. The weight percentage of volatiles, water and exempt compounds.
 - d. The volume percentage of water and exempt compounds.
 - e. The density of the material (in grams per liter).
 - f. For coatings and coating components containing tertiary butyl acetate, the actual content of tertiary butyl acetate per total volume of coating or coating component, expressed in grams per liter.
 - 401.2 **For each individual ready to spray mixture (based on the manufacturer's and repackager's stated mix ratio):**
 - a. The volatile organic compound regulatory content for coatings expressed in grams per liter, calculated pursuant to Section 407.
 - b. The volatile organic compound actual content for coatings expressed in grams per liter, calculated pursuant to Section 408.
 - c. The weight percentage of volatiles, water and exempt compounds.
 - d. The volume percentage of water and exempt compounds.
 - e. The density of the material (in grams per liter).
 - f. For each ready to spray mixture containing tertiary butyl acetate, the actual content of tertiary butyl acetate per total volume of the mixture, expressed in grams per liter.
 - 401.3 **For coating removers and solvents subject to Section 310 and 309:** The volatile organic compound content as calculated pursuant to Section 409.
- 402 **LABELING REQUIREMENTS:**
- 402.1 The manufacturer and repackager of automotive coatings or automotive coating components subject to Section 301 shall include on all containers the applicable use category(ies), and the VOC actual content for coatings and VOC regulatory content for coatings, as supplied, expressed in grams per liter.

402.2 The manufacturer and repackager of coating removers (strippers) subject to Section 310 and solvents subject to Section 309 shall include on all containers the VOC content for solvents, as supplied, expressed in grams per liter.

403 **OPERATION AND MAINTENANCE PLAN:** Any person using emissions control equipment pursuant to Section 304 must submit an Operation and Maintenance Plan for the emissions control equipment to the Air Pollution Control Officer for approval. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation and compliance of the emissions control equipment during periods of emissions-producing operations. The Plan shall also specify which daily records must be kept to document these operations and maintenance procedures. These records shall comply with the requirements of Section 502. The Plan shall be implemented upon approval by the Air Pollution Control Officer.

404 **PROCEDURE FOR PROCESSING OPERATION AND MAINTENANCE PLAN:**

404.1 **APPROVAL OF PLAN:** The Air Pollution Control Officer shall determine whether the Operation and Maintenance Plan meets the requirements of Section 403 not later than 30 days after receipt of the Plan, or within a longer period of time agreed upon by the parties. The Air Pollution Control Officer shall approve an Operation and Maintenance Plan unless it fails to demonstrate continuous operations of the emissions control equipment during periods of emissions producing operations, according to the standards set forth in Section 304, and/or it fails to specify which daily records, in accordance with the requirements of Section 502, are to be kept to document the operation and maintenance procedures set forth in the Plan.

404.2 **REVISION OF PLAN:** If the Air Pollution Control Officer does not approve an Operation and Maintenance Plan, the source shall receive written notice of the deficiency, and shall have an additional 30 days from the date of the notification of the deficiency to correct and resubmit the Operation and Maintenance Plan. The decision of the Air Pollution Control Officer regarding the resubmitted Operation and Maintenance Plan shall be final. Failure to correct the deficiency in an Operation and Maintenance Plan upon resubmittal shall constitute a violation of this rule that is subject to the penalties set forth in Health and Safety Code section 42400 et seq.

405 **DETERMINATION OF VOLATILE ORGANIC COMPOUND MASS EMISSION RATE AND PERCENT CONTROL EFFICIENCY:** The volatile organic compound mass emission rate shall be calculated both upstream and downstream of the emissions control device based on the respective volatile organic compound mass concentration and volumetric flowrate, pursuant to Section 504.4 and the following equation:

$$M = (Q)(C)(60 \text{ min/hr})$$

Where: M = volatile organic compound mass emission rate, in lb/hr.
 Q = the volumetric flowrate of the exhaust stack, in scfm.
 C = the volatile organic compound mass concentration, in lb/scf, as determined pursuant to the test methods in Section 504.4.

The percent control efficiency is calculated as follows:

$$\%CE = \frac{M_U - M_D}{M_U} \times 100$$

Where: CE = control efficiency.
 M_U = the upstream volatile organic compound mass emission rate, in lb/hr.
 M_D = the downstream volatile organic compound mass emission rate, in lb/hr.

- 406 **DETERMINATION OF OVERALL SYSTEM EFFICIENCY:** The overall system efficiency shall be determined using the following equation:

$$E = CE \times K$$

Where: E = Overall system control efficiency
 CE = Control efficiency as determined pursuant to Section 405
 K = Collection efficiency as determined in Section 504.5

- 407 **DETERMINATION OF VOLATILE ORGANIC COMPOUNDS REGULATORY CONTENT OF A COATING, LESS WATER AND EXEMPT COMPOUNDS (VOC REGULATORY):** The volume of coating material is defined as the volume of the original coating plus any material added to the original coating. The weight of volatile organic compounds per combined volume of volatile organic compounds and coating solids shall be calculated by the following equation:

$$G1 = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where: G1 = Regulatory content weight of volatile organic compounds per total volume of coating, less water and exempt compounds, in grams per liter
 Wv = Weight of volatile compounds including any volatile materials added to the original coating supplied by the manufacturer, in grams
 Ww = Weight of water, in grams
 Wec = Weight of exempt compounds as defined in Section 221, in grams
 Vm = Volume of coating material, in liters
 Vw = Volume of water, in liters
 Vec = Volume of exempt compounds as defined in Section 221, in liters

- 408 **DETERMINATION OF VOLATILE ORGANIC COMPOUNDS ACTUAL CONTENT OF A COATING (VOC ACTUAL):** The volume of coating material is defined as the volume of the original coating plus any material added to the original coating. The weight of volatile organic compounds per total volume of coating shall be calculated by the following equation:

$$G2 = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G2 = Actual content weight of volatile organic compounds per total volume of coating, in grams per liter
 Wv = Weight of volatile compounds including any volatile materials added to the original coating supplied by the manufacturer, in grams
 Ww = Weight of water, in grams
 Wec = Weight of exempt compounds as defined in Section 221, in grams
 Vm = Volume of coating material, in liters

- 409 **DETERMINATION OF VOLATILE ORGANIC COMPOUNDS ACTUAL CONTENT OF COATING REMOVERS (STRIPPERS) AND SOLVENTS:** The volume of material is defined as the volume of the original material, plus any volatile organic compound-containing material added to the original material. The weight of volatile organic compounds per total volume of material shall be calculated by the following equation:

$$G3 = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G3	=	Weight of volatile organic compound per total volume of material, in grams per liter
Wv	=	Weight of volatile compounds, in grams
Ww	=	Weight of water, in grams
Wec	=	Weight of exempt compounds as defined in Section 221, in grams
Vm	=	Volume of material, in liters

500 MONITORING AND RECORDS

- 501 **RECORDKEEPING FOR PROHIBITION OF SALE OR MANUFACTURE:** Any person claiming a prohibition of sale exception shall keep a detailed log on site, and make it available to the Air Pollution Control Officer immediately upon request, of each automotive coating component and automotive coating manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed showing:
- 501.1 The quantity manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed including size and number of containers.
 - 501.2 The volatile organic compound regulatory content for coatings as defined in Section 407.
 - 501.3 The volatile organic compound actual content for coatings as defined in Section 408.
 - 501.4 To whom they were supplied, sold, offered for sale, or distributed, or for whom they were manufactured, blended, or repackaged for sale including the name, address, phone number, retail tax license number, and valid district permit number (if a permit is required).
 - 501.5 The specific exception being utilized under Section 307.2.
- 502 **RECORDKEEPING FOR END USERS:** In addition to any applicable recordkeeping requirements of either Rule 202, New Source Review, Rule 209, Limiting Potential to Emit, or any other District rule which may be applicable, any person subject to this rule shall maintain the following records on site and make such records available immediately upon request to the Air Pollution Control Officer:
- 502.1 **LIST OF MATERIALS:** A current list shall be maintained of all coatings and solvents used that are subject to this rule. This list shall include the following information for each coating and solvent:
 - a. The material name and manufacturer.
 - b. The application method used.
 - c. The coating type as designated by the coating categories in Section 301 and mix ratio specific to the coating.
 - d. VOC actual content for coatings and VOC regulatory content for coatings, as applied, or VOC content for solvents.
 - e. Identification of the material as a coating or solvent.
 - 502.2 **PRODUCT DATA SHEET:** For each individual automotive coating or automotive coating component, coating remover (stripper), solvent, or ready to spray mixture, a data sheet shall be maintained on site. The data sheet shall comply with the requirements of Section 401.
 - 502.3 **PURCHASE AND USAGE RECORDS:** The following purchase and usage records shall be maintained on-site:
 - a. Monthly purchase records identifying the coating type (as listed in Section 301), name/code/manufacturer, and purchased volume of each material.
 - b. If, pursuant to Section 304, an emission control device is used as a means of compliance with this rule, daily records identifying the coating type (as listed in Section 301), name/code/manufacturer, and the total applied volume of each material.
 - c. For coatings containing tertiary butyl acetate, monthly records regarding use, including name/code/manufacturer of the coating and content of tertiary butyl acetate contained in each coating.
- 503 **DURATION OF RECORDS:** All records required by this rule shall be maintained on site for a continuous three-year period.

504 **TEST METHODS**

- 504.1 **DETERMINATION OF VOLATILE ORGANIC COMPOUND CONTENT:** Volatile organic compound content of coatings, coating removers (strippers), and solvents shall be determined using EPA Reference Method 24 and Sections 407, 408, 409, and 504.3 of this rule.
- 504.2 **DETERMINATION OF ACID CONTENT:** The weight percent acid in a pretreatment coating shall be determined in accordance with ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products" (April 2006).
- 504.3 **DETERMINATION OF COMPOUNDS EXEMPT FROM VOLATILE ORGANIC COMPOUND DEFINITION:** Compounds exempted from the volatile organic compound definition, other than those determined pursuant to Section 504.7 shall be determined in accordance with ASTM D4457-02, "Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph" (February 2008), or ARB method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings" (September 1989). If any of the 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 EPA-approved test method used to make the determination of these compounds.
- 504.4 **DETERMINATION OF CONTROL EFFICIENCY:** Control efficiency of the emissions control equipment shall be determined in accordance with EPA Method 25, 25A, 25B, EPA Method 2 or 2C (whichever is applicable), and Section 405.
- 504.5 **DETERMINATION OF COLLECTION EFFICIENCY:** Efficiency of the collection system shall be determined in accordance with the following:
- Applicable U.S. EPA methods 204, 204A, 204B, 204C, 204D, 204E, and/or 204F; or
 - Any other method approved by the U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.
- 504.6 **DETERMINATION OF METALLIC CONTENT:** Measurement of metallic content shall be conducted and reported in accordance with South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metals in Coatings by X-ray Diffraction".
- 504.7 **DETERMINATION OF METHYL ACETATE, ACETONE, t-BUTYL ACETATE, AND PCBTF CONTENT:** The quantity of methyl acetate, acetone, t-butyl acetate, and parachlorobenzotrifluoride shall be determined by using ASTM Method D6133-02: "Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solvent-borne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph" (February 2003).
- 504.8 **DETERMINATION OF SOLIDS CONTENT IN COATINGS:** The solids content shall be determined in accordance with ASTM Standard D2832-92, "Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings" (January 2005).
- 504.9 **DETERMINATION OF TRANSFER EFFICIENCY:** The transfer efficiency of alternative coating application methods (as specified in Section 305.1(e)) shall be determined using South Coast Air Quality Management District "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," (May 24, 1989) and South Coast Air Quality Management District "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns," (September 26, 2002).
- 504.10 **ALTERNATIVE TEST METHODS:** The use of other test methods which are determined to be equivalent or better and approved, in writing, by the Air Pollution Control Officer, ARB, and the U.S. EPA may be used in place of the test methods specified in this rule.
- 504.11 **MULTIPLE TEST METHODS:** When more than one test method or 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.