

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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RULE 1151. MOTOR VEHICLE AND MOBILE EQUIPMENT NON-ASSEMBLY LINE COATING OPERATIONS

(a) Purpose

The purpose of this rule is to reduce volatile organic compound (VOC) emissions, toxic air contaminants, stratospheric ozone-depleting compounds, and global-warming compound emissions from automotive coating applications performed on motor vehicles, mobile equipment, and associated parts and components.

(b) Applicability

This rule is applicable to any person who supplies, sells, offers for sale, markets, manufactures, blends, packages, repackages, possesses 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.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) **ADHESION PROMOTER** means any automotive coating, specifically labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent automotive coatings, and on which, a subsequent automotive coating is applied.
- (2) **AEROSOL COATING PRODUCT** means 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.
- (3) **ASSEMBLY LINE** means 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.
- (4) **ASSOCIATED PARTS AND COMPONENTS** means structures, devices, pieces, modules, sections, assemblies, subassemblies, or elements of any

motor vehicle or mobile equipment that are designed to be a part of any motor vehicle or mobile equipment but which are not attached to any motor vehicle or mobile equipment at the time of the application of an automotive coating to such structure, device, piece, module, section, assembly, subassembly, or element. Associated parts and components do not include circuit boards.

- (5) AUTOMOTIVE COATING means any coating used or recommended for use in motor vehicles, mobile equipment or associated parts and components in refinishing, service, maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive refinishing or automotive coating on the container or in product literature constitutes a recommendation for use in motor vehicle, mobile equipment and associated parts and components refinishing.
- (6) AUTOMOTIVE COATING COMPONENT means any portion of a coating, including, but not limited to, a reducer or thinner, toner, hardener, and additive, which is recommended for use in an automotive coating, or which is used in an automotive coating. The raw materials used to produce the components are not considered automotive coating components.
- (7) AUTOMOTIVE GRAPHIC ARTS OPERATION means the application of logos, letters, designs, numbers, or graphics to a painted surface by brush, roller or airbrush.
- (8) AUTOMOTIVE REFINISHING FACILITY means any shop, business, location, or parcel of land where motor vehicles or mobile equipment or their associated parts and components are coated, including autobody collision repair shops. Automotive refinishing facility does not include the original equipment manufacturing plant where the motor vehicle or mobile equipment is completely assembled.
- (9) CLEAR COATING means any automotive coating that is formulated with materials that do not impart color and is specifically labeled and formulated for application over a color coating or clear coating.
- (10) COATING means a material which is applied to a surface and forms a film in order to beautify, preserve, repair, or protect such a surface.
- (11) COLOR COATING means any pigmented automotive coating, excluding automotive adhesion promoters, primers, and multi-color coatings, that require a subsequent clear coating and which is applied over a primer,

adhesion promoter or color coating. Color coatings include metallic/iridescent color coatings.

- (12) ELECTROSTATIC SPRAY APPLICATION means any method of spray application of automotive coatings where an electrostatic attraction is created between the part to be coated and the paint particles.
- (13) EMISSION CONTROL SYSTEM means any combination of capture systems and control devices used to reduce VOC emissions from automotive coating operations.
- (14) EXEMPT COMPOUNDS are as defined in Rule 102-Definition of Terms.
- (15) GRAMS OF VOC PER LITER OF COATING LESS WATER AND LESS EXEMPT COMPOUNDS, OR REGULATORY VOC, is the weight of VOC per combined volume of VOC and coating solids and shall be calculated by the following equation:

$$\begin{aligned} &\text{Grams of VOC per Liter of Coating, Less} \\ &\text{Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}} \end{aligned}$$

- Where: W_s = weight of volatile compounds in grams
- W_w = weight of water in grams
- W_{es} = weight of exempt compounds in grams
- V_m = volume of material in liters
- V_w = volume of water in liters
- V_{es} = volume of exempt compounds in liters

- (16) GRAMS OF VOC PER LITER OF MATERIAL, OR ACTUAL VOC, is the weight of VOC per volume of material and shall be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

- Where: W_s = weight of volatile compounds in grams
- W_w = weight of water in grams
- W_{es} = weight of exempt compounds in grams
- V_m = volume of material in liters

- (17) HIGH-VOLUME, LOW-PRESSURE (HVLP) means spray application equipment designed to atomize 100 percent by air pressure only and is 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.

- (18) **METALLIC/IRIDESCENT COLOR COATING** means any automotive coating that contains more than 0.042 pounds per gallon (5 grams per liter) of metal or iridescent particles as applied, where such particles are visible in the dried film.
- (19) **MOBILE EQUIPMENT** means 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, and implements of husbandry or agriculture.
- (20) **MOTOR VEHICLE** means any self-propelled vehicle, including, but not limited to, motorcycles, passenger cars, light-duty trucks and vans, medium-duty and heavy-duty vehicles as defined in Section 1900, Title 13, of the California Administrative Code. Additional examples include, but are not limited to, buses, golf carts, tanks, and armored personnel carriers.
- (21) **MULTI-COLOR COATING** means any automotive 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.
- (22) **PRETREATMENT COATING** means any automotive coating that contains a minimum of one-half (0.5) percent acid by weight and not more than 16 percent solids by weight necessary to provide surface etching and that is specifically labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.
- (23) **PRIMER** means any automotive coating that is specifically labeled and formulated for application to a substrate to provide 1) a bond between the substrate and subsequent coats, 2) corrosion resistance, 3) a smooth substrate surface, or 4) resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented and include weld-through primers.
- (24) **SINGLE-STAGE COATING** means any pigmented automotive coating, (excluding automotive adhesion promoters, primers and multi-color coatings), specifically labeled and formulated for application without a subsequent clear coating and that are applied over an adhesion promoter, a

primer, or a color coating. Single-stage coatings include single-stage metallic/iridescent coatings.

- (25) SOLVENT CLEANING is as defined in Rule 1171 – Solvent Cleaning Operations.
- (26) SPOT REPAIR means repair of an area on a motor vehicle, mobile equipment, or associated parts or components of less than one square foot (929 square centimeters).
- (27) TEMPORARY PROTECTIVE COATING means any automotive coating specifically labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.
- (28) TRANSFER EFFICIENCY means the amount of coating solids adhering to the object being coated divided by the total amount of automotive coating solids sprayed, expressed as a percentage.
- (29) TRUCK BED LINER COATING means any automotive coating, excluding color, multi-color, and single stage coatings, specifically labeled and formulated for application to a truck bed to protect it from surface abrasion.
- (30) UNDERBODY COATING means any automotive coating specifically 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.
- (31) UNIFORM FINISH COATING means any automotive coating specifically labeled and formulated 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.
- (32) VOLATILE ORGANIC COMPOUND (VOC) is as defined in Rule 102-Definition of Terms. For the purpose of this rule, tertiary butyl acetate (TBAC) is not a VOC when used in automotive coatings other than color coatings and clear coatings.

The Executive Officer shall conduct a technical assessment on the use of TBAC as a non-VOC by December 31, 2016. In conducting the technical assessment, the Executive Officer shall consider all information available to the SCAQMD on TBAC including, toxicity, carcinogenic and health risk assessment studies. The Executive Office shall report to the Governing Board as to the appropriateness of maintaining TBAC as a non-VOC.

(33) WELD-THROUGH PRIMER means an automotive coating designed and labeled exclusively to provide a bridging or conducting effect for corrosion protection following welding.

(d) Requirements

(1) A person shall not apply any automotive coating to a motor vehicle, mobile equipment, or associated parts or components of a motor vehicle or mobile equipment that contains VOC in excess of the limits specified in the Table of Standards below. Compliance with the applicable VOC content limits shall be based on VOC content, including any material added to the original automotive coating supplied by the manufacturer, as applied, less water and exempt compounds.

TABLE OF STANDARDS

VOC CONTENT LIMITS Grams per Liter of Coating, Less Water and Less Exempt Compounds		
AUTOMOTIVE COATING CATEGORIES	Current Limit	
	g/L	Lb/Gal
Adhesion Promoter	540	4.5
Clear Coating	250	2.1
Color Coating	420	3.5
Multi-Color Coating	680	5.7
Pretreatment Coating	660	5.5
Primer	250	2.1
Single-Stage Coating	340	2.8
Temporary Protective Coating	60	0.5
Truck Bed Liner Coating	310	2.6
Underbody Coating	430	3.6
Uniform Finishing Coating	540	4.5
Any Other Coating Type	250	2.1

(2) Most Restrictive VOC Limit

If any representation or information on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature that indicates that the automotive coating meets the definition of or is recommended for use for more than

one of the automotive coating categories listed in paragraph (d)(1), then the lowest VOC content limit shall apply.

(3) Alternative Compliance

(A) Emission Control System

A person may comply with the provisions of paragraph (d)(1), by using an approved emission control system, consisting of collection and control devices, provided such emission control system is approved pursuant to Rule 203 – Permit to Operate, in writing, by the Executive Officer for reducing emissions of VOC. The Executive Officer shall approve such emission control system only if the VOC emissions resulting from the use of non-compliant automotive coatings will be reduced to a level equivalent to or lower than that which would have been achieved by the compliance with the terms of paragraph (d)(1). The required efficiency of an emission control system at which an equivalent or greater level of VOC emission reduction will be achieved shall be calculated by the following equation:

$$C.E. = \left[1 - \left\{ \frac{(VOC_{LWc})}{(VOC_{LWn,Max})} \times \frac{1 - (VOC_{LWn,Max}/D_{n,Max})}{1 - (VOC_{LWc}/D_c)} \right\} \right] \times 100$$

Where:

- C.E. = Control Efficiency, percent
- VOC_{LWc} = VOC Limit of Rule 1151, less water and less exempt compounds, pursuant to paragraph (d)(1).
- VOC_{LWn,Max} = Maximum VOC content of non-compliant automotive coating used in conjunction with a control device, less water and exempt compounds.
- D_{n,Max} = Density of VOC solvent, reducer, or thinner contained in the non-compliant automotive coating containing the maximum VOC.
- D_c = Density of corresponding VOC solvent, reducer, or thinner used in the compliant automotive coating system = 880 g/L.

(B) Alternative Emission Control Plan

A person may comply with the provisions of paragraph (d)(1) by means of an Alternative Emissions Control Plan, pursuant to Rule 108 – Alternative Emissions Control Plans.

(4) Exempt Compounds

A person shall not manufacture, sell, offer for sale, distribute for use in the District, or apply any automotive coating which contains any Group II Exempt Compounds as defined in Rule 102.

(5) Carcinogenic Materials

A person shall not manufacture automotive coatings for use in the SCAQMD in which cadmium or hexavalent chromium was introduced as a pigment or as an agent to impart any property or characteristic to the automotive coatings during manufacturing, distribution, or use of the applicable automotive coatings.

(6) Transfer Efficiency

(A) A person shall not apply automotive coatings to any motor vehicle, mobile equipment or any associated parts or components to a motor vehicle or mobile equipment except by the use of one of the following methods:

- (i) electrostatic application, or
- (ii) high-volume, low-pressure (HVLP) spray, or
- (iii) brush, dip, or roller, or
- (iv) Spray gun application, provided the owner or operator demonstrates that the spray gun meets the HVLP definition in paragraph (c)(17) in design and use. A satisfactory demonstration must be based on the manufacturer's published technical material on the design of the spray gun and by a demonstration of the operation of the spray gun using an air pressure tip gauge from the manufacturer of the spray gun.
- (v) Any such other automotive coating application methods as demonstrated, in accordance with the provisions of subparagraph (h)(1)(F), to be capable of achieving equivalent or better transfer efficiency than the automotive coating application method listed in clause (d)(6)(A)(ii),

provided written approval is obtained from the Executive Officer prior to use.

- (B) A person shall not apply any automotive coating by any of the methods listed in subparagraph (d)(6)(A) unless the automotive coating is applied with properly operating equipment, operated according to procedures recommended by the manufacturer and in compliance with applicable permit conditions, if any.
- (7) **Solvent Cleaning, Storage and Disposal of VOC-Containing Materials**
Solvent cleaning of application equipment, parts, products, tools, machinery, equipment, general work areas, and the storage and disposal of VOC-containing materials used in cleaning operations shall be carried out pursuant to SCAQMD Rule 1171 – Solvent Cleaning Operations.
- (e) **Prohibition of Possession, Specification and Sale**
 - (1) For the purpose of this rule, no person that applies automotive coatings subject to this rule shall possess any automotive coating that is not in compliance with requirements of paragraph (d)(1), unless one or more of the following conditions apply:
 - (A) The automotive coating is for use at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(3)(A) and the coating meets the limits specified in permit conditions.
 - (B) The automotive coating is for use at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(3)(B), and the automotive coating is specified in the plan.
 - (C) The automotive coating is for use at a training center and the automotive coating is used for educational purposes, provided that the VOC emissions from automotive coatings not meeting the VOC limits of paragraph (d)(1) do not exceed twelve (12) pounds per day.
 - (D) The automotive coating is for use at a prototype motor vehicle manufacturing facility and the automotive coating is supplied by an assembly-line motor vehicle manufacturer specifically for use in the refinishing of a prototype motor vehicle, provided that the VOC emissions from all automotive coatings not meeting the VOC

limits of paragraph (d)(1) do not exceed twenty-one (21) pounds per day and 930 pounds in any one calendar year.

- (2) For the purpose of this rule, no person shall solicit from, specify, or require any other person to use in the District any automotive coating which, when applied as supplied or thinned or reduced according to the manufacturer's recommendation for application, does not meet the:

(A) Applicable VOC limits required by paragraph (d)(1) for the specific application unless:

(i) The automotive coating is located at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(3)(A), and the automotive coating meets the limits specified in permit conditions; or,

(ii) The automotive coating is located at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(3)(B), and the automotive coating is specified in the plan; or

(iii) The automotive coating is specifically exempt pursuant to subdivision (j) of this rule.

(B) The requirements of paragraphs (d)(4) and (d)(5).

- (3) For the purpose of this rule, no person shall supply, sell, offer for sale, market, blend, package, repackage or distribute any automotive coating for use within the District subject to the provisions in this rule which, when applied as supplied or thinned or reduced according to the manufacturer's recommendation for application, does not meet the:

(A) Applicable VOC limits required by paragraph (d)(1) for the specific application, unless:

(i) The automotive coating is for use at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(3)(A), and the coating meets the limits specified in permit conditions; or,

(ii) The automotive coating is specifically exempt under subdivision (j) of this rule; or,

(iii) The automotive coating is for use at a facility that operates in accordance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(3)(B), and the automotive coating is specified in the plan; and,

- (iv) The person that supplies, sells, offers for sale, markets, blends, packages, repackages or distributes the automotive coating keeps the following records for at least five years and makes them available to the Executive Officer upon request:
 - (I) Automotive coating name and manufacturer;
 - (II) Application method as recommended;
 - (III) Automotive coating category and mix ratio specific to the automotive coating;
 - (IV) VOC content of the automotive coating;
 - (V) Documentation such as manufacturer specification sheets, material safety data sheets, technical data sheets, or any other air quality data sheets that demonstrate that the material is intended for use as an automotive coating;
 - (VI) Current manufacturer specification sheets, material safety data sheets, technical data sheets, or air quality data sheets, which list the VOC content of each ready-to-spray automotive coating (based on the manufacturer's stated mix ratio) and automotive coating components and VOC content of each solvent; and
 - (VII) Purchase records identifying the automotive coating category, name, and volume of automotive coatings.
 - (VIII) In addition, for sale to an end-user, the name and address of the person receiving the automotive coating, an acknowledgement warranting that the sale to an end-user will comply with this paragraph, including if use is for outside the District, and acknowledgement by the purchaser that this statement is correct.
- (B) The requirements of paragraphs (d)(4) and (d)(5).
- (4) For the purpose of this rule, no person shall solicit from, specify, require, offer for sale, sell, or distribute to any other person for use in the District any automotive coating application equipment which does not meet the requirements of subparagraph (d)(6)(A).

- (5) For the purpose of this rule, no person shall offer for sale, sell, supply, market, offer for sale or distribute an HVLP spray gun for use within the SCAQMD unless the person offering for sale, selling, marketing or distributing the HVLP spray gun for use within the SCAQMD provides accurate information to the spray gun recipient on the maximum inlet air pressure to the spray gun which would result in a maximum air pressure of 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns based on the manufacturer's published technical material on the design of the spray application equipment and by a demonstration of the operation of the spray application equipment using an air pressure tip gauge from the manufacturer of the gun. The information shall either be permanently marked on the gun, or provided on the company's letterhead or in the form of technical literature which clearly identifies the spray gun manufacturer, the seller, or the distributor.
 - (6) For the purpose of this rule, the requirements of paragraphs (e)(1), (e)(2), (e)(3) or (e)(4) shall apply to all written or oral agreements executed and entered into under the terms of which an automotive coating or an automotive coating application equipment shall be used at any location within the District.
- (f) Recordkeeping Requirements
- (1) Recordkeeping for VOC Emissions
Records of automotive coating usage shall be maintained pursuant to SCAQMD Rule 109 – Recordkeeping for Volatile Organic Compound Emissions, and shall at a minimum include the following information:
 - (A) Material name and manufacturer;
 - (B) Application method;
 - (C) Automotive coating category and mix ratio specific to the coating;
 - (D) Actual VOC and regulatory VOC, for the automotive coating;
 - (E) Documentation such as manufacturer specification sheets, material safety data sheets, technical data sheets, or any other air quality data sheets that indicate the material is intended for use as an automotive coating or solvent;
 - (F) Current manufacturer specification sheets, material safety data sheets, technical data sheets, or air quality data sheets, which list

the actual VOC and regulatory VOC, for each ready-to-spray automotive coating (based on the manufacturer's stated mix ratio), automotive coating components, and the VOC content for each solvent; and,

- (G) Purchase records identifying the automotive coating category, name, and the total volume of all coatings and solvents used.
- (2) Recordkeeping Requirements for Emission Control System

Any person using an emission control system shall maintain daily records of key system operating parameters which will demonstrate continuous operation and compliance of the emission control system during periods of VOC emission producing activities. "Key system operating parameters" are those parameters necessary to ensure or document compliance with subparagraph (d)(3)(A), including, but not limited to, temperatures, pressure drops, and air flow rates.
- (g) Administrative Requirements for Automotive Coating Manufacturers
 - (1) Compliance Statement Requirement

For each individual automotive coating, automotive coating component, and ready to spray mixture (based on the manufacturers stated mix ratio), the manufacturer shall include the following information on a product data sheet, or an equivalent medium:

 - (A) The actual VOC and regulatory VOC for automotive coatings (in grams per liter);
 - (B) The weight percentage of volatiles, water, and exempt compounds; and,
 - (C) The density of the material (in grams per liter).
 - (2) Labeling Requirements
 - (A) The manufacturer of automotive coatings or automotive coating components, including hardeners, with the exception of solvents such as reducers and thinners, shall include on all containers the applicable use automotive coating category, and the actual VOC and regulatory VOC content, as supplied (in grams of VOC per liter of material and in grams of VOC per liter of material, less water and exempt compounds).

- (B) The manufacturer of solvents, including reducers and thinners, subject to this rule shall include on all containers the actual VOC for solvents, as supplied (in grams of VOC per liter of material).

(h) Test Methods

(1) Methods of Analysis

For the purpose of this rule, the following test methods shall be used:

- (A) VOC Content of Automotive Coatings
 - (i) United States Environmental Protection Agency (U.S. EPA) Reference Test Method 24, (Determination of Volatile Matter Content, Water Content, Volume Solids and Weight Solids of Surface Coatings, Code of Federal Regulations, Title 40 Part 60, Appendix A). The exempt compounds' content shall be determined by South Coast Air Quality Management District (SCAQMD) Laboratory Test Method 303 (Determination of Exempt Compounds) contained in the SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual; or
 - (ii) SCAQMD Method 304 [Determination of Volatile Organic Compounds (VOCs) in Various Materials] contained in the SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual.

(B) Exempt Perfluorocarbon Compounds

The following classes of compounds:

- cyclic, branched, or linear, completely fluorinated alkanes;
- cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,

shall be analyzed as exempt compounds for compliance with paragraph (d)(1), only at such time as manufacturers specify which individual compounds are used in the formulation of the automotive coatings and identify the test methods, which have been approved by the U.S. EPA, CARB and the SCAQMD prior to

such analysis, that can be used to quantify the amounts of each exempt compound.

(C) Determination of Iridescent Particles in Metallic/Iridescent Coatings

The metal and silicon content of metallic/iridescent coatings shall be determined by SCAQMD Method 311 (Determination of Percent Metal in Metallic Coatings by Spectrographic Method) contained in the SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual.

(D) Acid Content in Pretreatment Automotive Coatings

The acid content of pretreatment automotive coatings shall be determined by ASTM Test Method D1613-06 (2012) (Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and related products).

(E) Reflectance of Anti-Glare Safety Automotive Coatings

The reflectance of anti-glare safety automotive coatings shall be determined by ASTM Test Method D-523-08 (Specular Gloss).

(F) Transfer Efficiency

The transfer efficiency of alternative automotive coating application methods, as defined by clause (d)(6)(A)(v), shall be determined in accordance with the SCAQMD method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989," and SCAQMD "Guidelines for Demonstrating Equivalency With District Approved Transfer Efficiency Spray Gun September 26, 2002."

(G) Equivalent Test Methods

Other test methods determined to be equivalent by the Executive Officer, CARB, and the U.S. EPA, and approved in writing by the Executive Officer may also be used.

(2) Determination of Efficiency of Emission Control Systems

(A) The efficiency of the collection device of an emission control system as specified in subparagraph (d)(3)(A) shall be determined by the methods specified below:

- (i) U.S. EPA method cited in 55 Federal Register (FR) 26865, June 29, 1990; or

- (ii) SCAQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency"; or
 - (iii) Any other method approved by the U.S. EPA, CARB, and the District Executive Officer.
 - (B) The efficiency of the control device of an emission control system as specified in subparagraph (d)(3)(A) and the VOC content in the control device exhaust gases, measured and calculated as carbon, shall be determined by USEPA Test Methods 25, 25A, or SCAQMD Method 25.1 (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) as applicable. U.S. EPA Test Method 18, or CARB Method 422 shall be used to determine emissions of exempt compounds.
- (3) **Multiple Test Methods**

When more than one test method or set of test methods are 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 the rule.
- (i) **Rule 442 Applicability**

Any automotive coating, automotive coating operation or facility which is exempt pursuant to subdivision (j) from all or a portion of the VOC limits of subdivision (d) shall comply with the provisions of Rule 442 – Usage of Solvents.
- (j) **Exemptions**
 - (1) This rule shall not apply to:
 - (A) Any automotive coating applied to motor vehicles or mobile equipment, or their associated parts and components, during manufacture on an assembly line that is subject to Rule 1115 - Motor Vehicle Assembly Line Coating Operations;
 - (B) Any automotive coating that is expressly offered for sale, sold, or manufactured for use outside of the District or that is for shipment to other manufacturers for reformulation or repackaging;
 - (C) Any aerosol coating product; and
 - (D) Any automotive coating that is supplied, sold, offered for sale, marketed, manufactured, blended, packaged or repackaged for use in the District in 0.5 fluid ounces or smaller containers.

- (2) The requirements of paragraph (d)(1) shall not apply to automotive coatings applied for educational purposes at automotive coating training centers, which are owned and operated by automotive coating manufacturers, provided that the VOC emissions emitted at a automotive coating training center from automotive coatings not complying with paragraph (d)(1) do not exceed twelve (12) pounds per day.
- (3) The requirements of paragraph (d)(1) shall not apply to automotive coatings supplied by an assembly-line motor vehicle manufacturer for use by a prototype motor vehicle manufacturing facility in the finishing of a prototype motor vehicle, provided that the VOC emissions at the prototype motor vehicle manufacturing facility from such topcoats do not exceed 21 pounds in a calendar day and 930 pounds in a calendar year.
- (4) The requirements of subparagraph (d)(6)(A) shall not apply to automotive graphic arts operations, truck bed liner coatings, or underbody coatings.