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RULE 1116
Automotive Refinishing Operations

(A) General

(1) Purpose

(a) The purpose of this rule is to limit the emission of Volatile Organic Compounds (VOC) from Coatings associated with the Refinishing of Motor Vehicles, Mobile Equipment and their Associated Parts and Components. It also limits the VOC emissions from Solvent cleaning, storage, and disposal associated with such operations.

(2) Applicability

(a) This rule is applicable to:

(i) Any Person who uses, applies, or, solicits the use or application of any Automotive Coating or associated Solvent within the District.

(ii) Any Person who supplies, sells, offers for sale, manufactures, or distributes any Automotive Coating or associated Solvent for use within the District.

(B) Definitions

For the purposes of this rule, the following definitions apply:

(1) "Additive"- Any substance added in small quantities to another substance in order to increase volume and/or change the physical properties of the mixture.

(2) "Adhesion Promoter"- A 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.

(3) "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 applications, or for use in specialized equipment for ground traffic/marking applications.

(4) "Air Pollution Control Officer (APCO)"- The Person appointed by the Air Pollution Control Board and assigned full time to manage and direct the business and operations of the District. The Air Pollution Control Officer is also the Executive Director, and is that Person described for state purposes as the Air Pollution Control Officer.

(5) "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.

(6) "Associated Parts and Components"- 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, piece, module, section, assembly, subassembly, or element. The Associated Parts and Components definition does not include circuit boards.

(7) "Automotive Coating"- Any coating or Automotive Coating Component, used or recommended for use, in Motor Vehicle or Mobile Equipment Refinishing, service, maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive Refinishing or Automotive Coating made by a Person, on the container, or in product literature constitutes a recommendation for use in Motor Vehicle or Mobile Equipment Refinishing.

(8) "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.

(9) "Automotive Refinishing Facility"- 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 (OEM) plant where the Motor Vehicle or Mobile Equipment is completely assembled.

(10) "Catalyst"- A substance whose presence initiates/enhances the reaction between chemical compounds.

(11) "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, or general work areas.

(12) "Clear Coating"- Any coating that contains no pigments and is labeled and formulated for application over a Color Coating or Clear Coating.

(13) "Coating"- Any material which is applied to a surface and which forms a film in order to beautify, preserve, repair, and/or protect such surface.

(14) "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 or Adhesion Promoter. Color Coatings include metallic/iridescent Color Coatings.

(15) "District"- The Mojave Desert Air Quality Management District. The geographical area of which is described in Mojave Desert Air Quality Management District Rule 103.

(16) "Electrostatic Application"- Any method of spray application of coatings where an electrostatic attraction is created between the part to be coated and the paint particles.

(17) "Emission Control System"- Any combination of capture systems and control devices used to reduce VOC emissions from Automotive Coating operations.

(18) "Exempt Compounds"- Those compounds listed in 40 Code of Federal Regulation (CFR) 51.100(s).

(19) "Finish"- The Coating of incomplete vehicles, their parts and components, or Mobile Equipment for which the original Coating was not applied from an Original Equipment Manufacturer (OEM) plant Coating Assembly Line.

(20) "Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds"- The weight of VOC per combined volume of VOC and Coating solids is calculated by the following equation:

$$G_{VOC/LoC} = \frac{W_S - W_W - W_{ES}}{V_M - V_W - V_{ES}}$$

Where:

$G_{VOC/LoC}$ = Grams VOC per Liter of Coating Less Water and Exempt Compounds
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

(21) "Grams of VOC per Liter of Material"- The weight of VOC per volume of material and shall be calculated by the following equation:

$$G_{VOC\,/\,LoM} = \frac{W_S - W_W - W_{ES}}{V_M}$$

Where:

$G_{VOC/LoM}$	=	Grams VOC per Liter of Material
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

(22) "Group II Exempt Compounds"- Compounds that are restricted because they are either toxic, potentially toxic, upper-atmosphere ozone depleters, or cause other environmental impacts. These compounds are listed as follows:

methylene chloride (dichloromethane)
1,1,1-trichloroethane (methyl chloroform)
Trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
cyclic, branched, or linear, completely methylated siloxanes (VMS)
tetrachloroethylene (perchloroethylene)
ethylfluoride (HFC-161)
1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
1,1,2,2,3-pentafluoropropane (HFC-245ca)
1,1,2,3,3-pentafluoropropane (HFC-245ea)
1,1,1,2,3-pentafluoropropane (HFC-245eb)
1,1,1,3,3-pentafluoropropane (HFC-245fa)
1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
1,1,1,3,3-pentafluorobutane (HFC-365mfc)
chlorofluoromethane (HCFC-31)
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
1 chloro-1-fluoroethane (HCFC-151a)

(23) "High-Volume, Low-Pressure (HVLP) Spray"- Spray equipment permanently labeled as such and 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.

(24) "Metallic/Iridescent Color Coating"- Any Coating which contains more than 5 grams per liter (0.042 pounds per gallon) of metal or iridescent particles, as applied, where such particles are visible in the dried film.

(25) "Mobile Equipment"- Any equipment or device which may be drawn, or is capable of being driven, on rails or a roadway including, but not limited to, trains, railcars, truck bodies, truck trailers, utility bodies, camper shells, mobile cranes, bulldozers, street cleaners, and implements of husbandry or agriculture.

(26) "Motor Vehicle"- Any self-propelled vehicle, including, but not limited to cars, trucks, buses, golf carts, vans, motorcycles, tanks, and armored personnel carriers.

(27) "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.

(28) "Person" - Shall have the same meaning as defined in the California Health and Safety Code §39047.

(29) "Pretreatment Coating"- Any 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 is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.

(30) "Primer"- Any Coating which is labeled and formulated for application to a substrate to provide:

(a) A bond between the substrate and subsequent coats;

(b) Corrosion resistance;

(c) A smooth substrate surface; or

(d) Resistance to penetration of subsequent coats, and on which a subsequent Coating is applied. Primers may be pigmented.

(31) "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, and to promote the ability of an undercoat to resist penetration by the Color Coating.

(32) "Reducer"- The Solvent used to thin enamel.

(33) "Refinishing"- Any Coating of Motor Vehicles, their Associated Parts and Components, or Mobile Equipment, including partial body collision repairs, for the purpose of protection or beautification and which is subsequent to the original Coating applied at an original equipment manufacturing (OEM) plant Coating Assembly Line.

(34) "Single-stage Coating"- Any pigmented Coating, excluding Primers, and Multi-color Coatings, labeled and formulated for application without a subsequent clear coat. Single-stage coatings include Single-stage Metallic/Iridescent Coating.

(35) "Solvent"- a VOC-containing fluid used to perform cleaning operations, primarily for the conditioning of a surface to receive a Coating or in Cleaning Operations.

(36) "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).

(37) "Stripping"- The use of Solvent to remove material such as cured adhesives, cured inks, cured or dried paint, cured or dried paint residue, or Temporary Protective Coatings.

(38) "Targeted HAP Compounds"- The hazardous air pollutant (HAP) compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) targeted by 40 CFR 63 Subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.

(39) "Temporary Protective Coatings"- Any Coating which is labeled and formulated for the purpose of temporarily protecting areas form overspray or mechanical damage.

(40) "Topcoat"- Any Coating applied over a Primer, Primer system or an original equipment manufacturer (OEM) Finish for the purpose of protection or appearance.

(41) "Transfer Efficiency"- The ratio of Coating solids adhering to the object being coated to the total amount of Coating solids used in the application process, expressed as a percentage.

(42) "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.

(43) "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.

(44) "Uniform Finish Coating"- Any Coating 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.

(45) "VOC Actual" - This definition is the same as the definition of Grams of VOC per Liter of Material as listed under subsection (B)(21).

(46) "VOC Regulatory" - This definition is the same as the definition of Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds as listed under subsection (B)(20).

(47) "Volatile Organic Compound (VOC)"- Any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and Exempt Compounds.

(C) Requirements

(1) VOC Contents of Coatings

(a) Effective on the dates specified, a Person shall not apply Coating to a Motor Vehicle, Mobile Equipment, or Associated Parts or Components, that has a VOC content in excess of the limits contained in Table 1 and Table 2 of this subsection.

Table 1 - Coating Categories and VOC Limits

	VOC Regulatory Limit, as applied, in grams per Liter (pounds per gallon)
Coating Categories	**Effective on and after 7/1/2011**
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)
Primer Sealer	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 Finish Coating	540 (4.5)
Any Other Coating Type	250 (2.1)

Table 2 - Coating Categories and VOC Limits

Coating Categories	VOC Regulatory Limit, as applied, in grams per Liter (pounds per gallon)	
	Group 1* Vehicles prior to 7/1/2011	**Group 2** vehicles prior to 7/1/2011**
Pretreatment Wash Primer	780 (6.5)	780 (6.5)
Primer	250 (2.1)	250 (2.1)
Primer Sealer	250 (2.1)	340 (2.8)
Topcoat	340 (2.8)	420 (3.5)
Metallic Topcoat	420 (3.5)	420 (3.5)
Extreme Performance	420 (3.5)	420 (3.5)

*Group 1 Vehicles are public transit buses and mobile equipment including but not limited to: truck bodies, truck trailers, utility bodies, camper shells, mobile cranes, bulldozers, street cleaners, golf carts, and implements of husbandry, where color match is not required.

**Group 2 Vehicles are passenger cars; large/heavy duty truck cabs and chassis with a manufacturer's gross vehicle weight over 10,000 pounds; light and medium duty trucks and vans having a manufacturer's gross vehicle weight rating of 10,000 pounds or less; and motorcycles; and Group 1 Vehicles where color match is required.

(b) Compliance with the VOC limits shall be based on VOC content, including any VOC material added to the original coating supplied by the manufacturer, less water and Exempt Compounds, as applied to the Motor Vehicle, Mobile Equipment, or Associated Parts or Components.

(2) Most Restrictive VOC Limit

(a) 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, any representation is made that indicates that the Coating meets the definition of, or is recommended for use of, more than one of the Coating categories listed in subsection (C)(1)(a) and (b), then the lowest applicable VOC content limit in Table 1 and Table 2 shall apply.

(3) Alternative Compliance

(a) Emission Control System

A Person may comply with the provisions of subsection (C)(1) by using an approved Emission Control System consisting of collection and control devices, that is approved, in writing, by the APCO for reducing emissions of VOC. The APCO shall approve such Emission Control Systems 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 subsection (C)(1). The approved Emission Control System must achieve a control efficiency of at least 85 percent. 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:

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

Where:

CE = Control Efficiency, as a percent

VOC_{LWc} = VOC Limit of Rule 1116, less water and less Exempt Compounds, pursuant to subsection (C)(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 grams per liter

(4) Prohibited Compounds

(a) 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.

(5) Carcinogenic Materials

(a) A Person shall not manufacture, sell, offer for sale, distribute for use in the District, or apply any Automotive Coatings that contain cadmium or hexavalent chromium. This includes any Automotive Coating in which cadmium or hexavalent chromium was introduced as a pigment or as an agent to impart any property or characteristic to the Coatings during manufacturing, distribution, or use of the applicable Coatings as defined by the Air Toxic Control Measure (ATCM) for Emissions of Hexavalent Chromium and Cadmium from Motor Vehicle and Mobile Equipment Coatings, Title 17 CCR, section 93112.

(6) Application Methods

(a) For all Automotive Coatings, any Person shall not apply any Coating to Motor Vehicles or Mobile Equipment or their Associated Parts and Components unless one of the following methods is used:

(i) Electrostatic Application equipment, operated in accordance with the manufacturer's recommendations and in compliance with permit conditions.

(ii) HVLP Spray equipment, operated in accordance with the manufacturer's recommendations and in compliance with permit conditions.

(iii) Any other Coating application which has been demonstrated to the satisfaction of the APCO to be capable of achieving a Transfer Efficiency equivalent to, or higher than, the application methods listed in subsections (C)(6)(a)(i) and (C)(6)(a)(ii) above, but not less than 65 percent, as per subsections (G)(2)(c) and (G)(2)(d), and for which written approval of the APCO has been obtained.

(7) Prohibition of Possession, Specification and Sale

(a) No Person that applies Automotive Coatings subject to this rule shall posses any Automotive Coating that is not in compliance with requirements of subsection (C)(1), unless one or more of the following conditions apply:

(i) The Coating is located at a facility that utilizes an approved Emission Control System pursuant to subparagraph (C)(3)(a), and the Coating meets the limits specified in permit conditions.

(ii) The Coating is located at a training center and the Coating is used for educational purposes, provided that the VOC emissions from Coatings not meeting VOC limits of subsection (C)(1) do not exceed twelve (12) pounds per day.

(iii) The Topcoat is located at a prototype Motor Vehicle manufacturing facility and the Coating is supplied by an Assembly Line Motor Vehicle manufacturer for use in the Refinishing of a prototype Motor Vehicle, provided that the VOC emissions from Coatings not meeting the VOC limits of subsection (C)(1) do not exceed twenty-one (21) pounds per day and 930 pounds in any one calendar year.

(b) No Person shall solicit from, 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:

(i) Applicable VOC limits required by subsection (C)(1) for the specific application unless:

a. The Coating is located at a Automotive Refinishing Facility that utilizes an approved Emission Control System pursuant to subsection (C)(3)(a), and the Coating meets the limits specified in permit conditions.

b. The Coating is specifically exempt pursuant to section (D) of this rule.

(c) No Person shall offer for sale, sell, or distribute for 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:

(i) Applicable VOC limits required by subsection (C)(1) for the specific application, unless:

a. The Coating is located at an Automotive Refinishing Facility that utilizes an approved Emission Control System pursuant to subsection (C)(3)(a), and the Coating meets the limits specified in permit conditions.

b. The Coating is specifically exempt under section (D) of this rule.

c. The Person that offers for sale or distributes the Coating keeps the following records for at least five (5) years and makes them available to the APCO upon request, the following information:

1. Coating name and manufacturer;
2. Application method;
3. Automotive Coating category and mix ratio specific to the Coating;
4. VOC content of Coating;
5. Documentation that the material is a Coating;
6. Current manufacturer specification sheets, material safety data sheets (MSDS), technical data sheets, or air quality data sheets, which list the VOC content of each ready-to-spray Coating (based on the manufacturer's stated mix ratio), Automotive Coating Components, and VOC content of each solvent;
7. Purchase records identifying the Automotive Coating category, name, and volume of Coatings; and,
8. The name and address of the Person purchasing the Coating, a statement of the basis the purchase will comply with this paragraph, including if use is for

outside the District, and acknowledgement by the purchaser that this statement is correct.

(ii) Requirements of subsections (C)(4) and (C)(5).

(d) No Person shall solicit from, require, offer for sale to, sell to, or distribute to any other Person for use in the District any Automotive Coating application equipment that does not meet the requirements of subsection (C)(6).

(e) The requirements of subsections (C)(1), (C)(2), and (C)(3) shall apply to all written or oral agreements executed and entered into under terms of which an Automotive Coating or Coating application equipment shall be used at any location within the District.

(8) Surface Preparation and Cleaning Operations

(a) The requirements of this subsection shall apply to any Person using Solvent for Surface Preparation and Cleaning Operations.

(i) Any Person shall not use an organic compound(s), or mixture thereof, (excluding Exempt Compounds) for Surface Preparation with a VOC content in excess of twenty-five (25) grams per liter (0.21 pounds per gallon) of material.

(ii) Any Person shall use closed, non-absorbent containers for the storage or disposal of any applicator (including brushes, swabs, cloth or paper) used for solvent Surface Preparation and Cleaning Operations.

(iii) Any Person shall store fresh or spent solvent in vapor tight and closed containers.

(iv) Any Person shall not use organic compounds for the Cleaning Operations of spray equipment including paint liners unless an enclosed system is used for Cleaning Operations. The system shall enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures. Equipment used shall minimize the evaporation of organic compounds to the atmosphere.

(b) Effective July 1, 2011, no Person shall possess at any Automotive Refinishing Facility, any Solvent with a VOC content that does not comply with the requirements in subsection (C)(8)(a)(i).

(D) Exemptions

(1) The provisions of this rule shall not apply to:

(a) Any Coating applied to Motor Vehicle or Mobile Equipment, or their Associated Parts and Components, during manufacture on an Assembly Line.

(b) Any Automotive Coating that is offered for sale, sold, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.

(c) Any Aerosol Coating Product.

(d) Any Automotive Coating that is sold, supplied, or offered for sale in one-half (0.5) fluid ounces or smaller containers.

(2) The requirements of subsection (C)(1) shall not apply to Automotive Coatings applied for educational purposes at Coating training centers, which are owned and operated by Coating manufacturers, provided that the VOC emissions emitted at a Coating training center from Coatings not complying with subsection (C)(1) does not exceed twelve (12) pounds per day.

(3) The requirements of subsection (C)(1) shall not apply to 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 twenty-one (21) pounds in a calendar day and 930 pounds in a calendar year.

(4) Any facility or Person classified as exempt or claiming to be exempt under this section, (D), shall meet the record keeping requirements of this rule so as to be able to prove the exemption status.

(5) Rule 442 Applicability

(a) Any Coating, Coating operation, or facility which is exempt from all or a portion of the VOC limits of this rule shall comply with the provisions of Rule 442.

(E) Administrative Requirements

(1) Manufacturer’s Compliance Statement Requirement

(a) 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:

(i) The VOC Actual and the VOC Regulatory for Coatings (in grams per liter).
(ii) The weight percentage of volatiles, water, and Exempt Compounds.
(iii) The volume percentage of water and Exempt Compounds.
(iv) The density of the material (in grams per liter).
(v) The weight percentage of all Targeted HAP Compounds.

(2) Manufacturer's Labeling Requirements

(a) The manufacturer of Automobile Coatings or Automotive Coating Components shall include, on all containers, the applicable use Coating category(ies), and the VOC Actual and the VOC Regulatory for Coatings, as supplied (in grams per liter).

(b) The manufacturer of Solvents subject to this rule shall include on all containers the VOC content for Solvents, as supplied (in grams per liter)

(F) Monitoring and Records

(1) All Persons subject to this rule and any Person claiming any exemption under subsection (D)(1) shall comply with the following requirements:

(a) Maintain and have available during an inspection, a current list of Automotive Coatings in use which provides all of the Coating data necessary to evaluate compliance, including the following information:

(i) The Additive, Automotive Coating, Catalyst, and Reducer used, i.e. material name and manufacturer.
(ii) The mix ratio of components used.
(iii) The VOC Actual and the VOC Regulatory content of each Automotive Coating as applied.
(iii) The Targeted HAP Compounds content as applied in weight percentage.
(v) The application method used .

(b) Maintain records on a daily basis including:

(i) Automotive Coating and mix ratio of components used in the Automotive Coating.
(ii) Quantity of each Automotive Coating applied.
(iii) Application method used to apply Automotive Coating.
(iii) Any Person/facility utilizing an add-on Emission Control System as a means of complying with provisions of this rule shall also maintain records of key system operating and maintenance data for the purpose of demonstrating continuous compliance during

periods of emission producing activities. The data shall be recorded in a manner as prescribed by the District.

(c) Maintain records on a monthly basis for Surface Preparation and Cleaning Operations including:

(i) The name and manufacturer of the Solvent used, including methylene chloride (MeCl).
(i) The amount of each Solvent and methylene chloride (MeCl) consumed for any use, in gallons.
(ii) The weight percentage of each Solvent and methylene chloride (MeCl) consumed for any use.

(d) Such records shall be retained and available for inspection by the APCO for a minimum of five (5) years.

(G) Test Methods

(1) A violation of the limits contained in this rule as determined by any one of these test methods shall constitute a violation of this rule.

(2) The following specified test methods shall be used to determine compliance with the provisions of this rule.

(a) VOC Determination

(i) Samples of Automotive Coatings as specified in subsection (C)(1)) shall be analyzed as prescribed by EPA Reference Method 24, as set forth in appendix A of Title 40 of the Code of Federal Regulations (40 CFR) Part 60, "Determination of Volatile Matter Content, Water Content, Density , Volume Solids, and Weight Solids of Surface Coatings" for VOC content (without correction for Exempt Compounds) and the American Society for Testing Materials (ASTM) Test Method D4457-85, 91(*Standard Test Method for Volatile Content of Coatings*), or ARB Method 432 ("Determination of Dichloromethane and 1,1,1 – Trichloroethane in Paints and Coatings", 1989) for determination of emissions of Exempt Compounds. Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

(b) Determination of Emissions-Operations with Emission Control Systems

(i) For operations with Emission Control Systems, VOC emissions as specified in subsection (C)(3)(a) shall be measured as prescribed by EPA Reference Method 25, 25A, or 25B, Title 40 Code of Federal Regulations, Part 60, Appendix A, for determining VOC emissions and control device efficiency, in combination with the methods prescribed in U.S. EPA's "Guidelines for Determining Capture Efficiency." (January 9 1995) and Title 40 Code of Federal Regulations, Part 51, Appendix M, Methods 204-204f, as applicable, for determination of capture efficiency.

(c) Determination of HVLP Transfer Efficiency Equivalence

(i) Transfer Efficiency equivalent to HVLP as required by subsection (C)(6)(a)(iii) shall be determined by procedures as prescribed in the South Coast Air Quality Management District (SCAQMD) document "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002".

(d) Determination of Transfer Efficiency

(i) Transfer Efficiency as required by subsection (C)(6)(a)(iii) shall be determined by procedures as prescribed in the SCAQMD document "South Coast Air Quality management District Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989".

(e) Determination of Percentage of Metal in Metallic/Iridescent Color Coatings

(i) Determinations shall be made using SCAQMD Method 311, "Determination of Percent Metal in Metallic Coatings by Spectrographic Method", as found in the SCAQMD document *Laboratory Methods Of Analysis For Enforcement Samples* (February 1997).

(f) Acid Content in Pretreatment Coatings

(i) Determinations of acid content in Pretreatment Coatings shall be made using ASTM Test Method D1613-03 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products".

(g) Determination of Methyl Acetate, Acetone, and PCBTF Content

(i) The quantity of methyl acetate , acetone, t-butyl acetate, and parachlorobenzotrifluoride (as specified in subsections (B)(18), (B)(20), (B)(21), and (B)(44) shall be determined by using ASTM Method D6133-02: "Standard Test Method for Acetone, *p*-Chlorobenzotrifluoride, Methyl Acetate or *t*-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw materials by Direct Injection Into a Gas Chromatograph" (February 2003).

(h) Exempt Compound Content

(i) Exempt Compound content, other than as determined pursuant to subsection (G)(f)(i) shall be determined by using CARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings" (September 12, 1998); CARB Method 422, "Determination of Volatile Organic Compounds in Emissions form Stationary Sources" (January 22, 1987); or, SCAQMD Method 303-91, "Determination of Exempt Compounds" (February 1993).

SIP: Submitted as amended mm/dd/yy on mm/dd/yy; Approved 04/10/00, 65 FR 18901, 40 CFR 52.220(c)(268)(i)(8)(B)(1); Approved 6/13/95, 60 FR 31081, 40 CFR 52.220(c)(216)(i)(A)(1); Approved 12/20/93, 58 FR 66283, 40 CFR 52.220(c)(188)(i)(B)(1)]