

**RULE 67.20. MOTOR VEHICLE AND MOBILE EQUIPMENT REFINISHING OPERATIONS** (Adopted November 13, 1996 / Effective August 13, 1997)

(a) **APPLICABILITY**

(1) Except as otherwise provided in Section (b), this rule is applicable to all motor vehicle and mobile equipment refinishing (coating) operations, including the refinishing or finishing of motor vehicles, mobile equipment, bicycles, nonmotorized models, and their component parts.

(2) Finishing and refinishing operations which are subject to the provisions of this rule shall not be subject to Rule 66 or Rule 67.3.

(b) **EXEMPTIONS**

(1) The provisions of this rule shall not apply to coating of motor vehicle, mobile equipment, bicycle, or nonmotorized model component parts or accessories, as identified by the original equipment manufacturer's (OEM) parts list, during original manufacture. Rules 66, 67.3, 67.11, or 67.12 shall apply to such coating operations, as applicable.

(2) The provisions of this rule shall not apply to noncommercial motor vehicle and mobile equipment refinishing operations performed by any individual at his/her residence for the purpose of finishing or refinishing that individual's personal vehicles.

(3) The provisions of this rule shall not apply to the following:

- (i) Touch-up coatings.
- (ii) Graphic design applications.
- (iii) Coatings applied using non-refillable hand-held aerosol spray containers.
- (iv) Body fillers.
- (v) Bedliner coatings.

(4) The provisions of this rule shall not apply to coating of radiators or engine components. Rule 67.3 shall apply to such coating operations.

(5) The provisions of Subsections (d)(1), (d)(2), and (d)(3) shall not apply to coatings which are used exclusively for the purpose of restoring motor vehicles provided:

- (i) Not more than 50 gallons per year of all such noncompliant coatings are used at the stationary source; and

(ii) Not more than 30 vehicles are restored in whole or in part per calendar year at the stationary source; and

(iii) Each vehicle restoration takes not less than sixty days; and

(iv) No other motor vehicle or mobile equipment finishing or refinishing operations occur at the same stationary source.

It shall be the responsibility of any person claiming this exemption to maintain monthly records of the number of vehicles restored, the number of days required for each restoration, and the coating usage along with a copy of the records provided by the manufacturer or supplier as specified in Subsection (d)(10). These records shall be retained on site for at least three years and made readily available to the District upon request.

(6) The provisions of Subsections (d)(1), (d)(2), (d)(3), (d)(5), and (f)(1)(ii) shall not apply to underbody coatings and topcoat sealants.

(7) The provisions of this rule shall not apply to equipment that is subject to Rule 67.6 and is used for surface preparation during motor vehicle and mobile equipment refinishing operations.

(8) The provisions of this rule shall not apply to the coating of mobile-homes. Rule 67.0 shall apply to such coating operations.

(c) **DEFINITIONS**

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

(1) **"Adhesion Promoter"** means a coating to be used in lieu of sanding a surface to promote adhesion of a refinish topcoat to surfaces such as the original topcoats applied at an OEM plant or thermosetting enamels. Such coatings are primarily used for hard-to-sand areas (including, but not limited to, trim moldings, door locks and door sills) or in the case of spot repairs, to effectively blend in the refinished area into the surrounding unrefinished area. No topcoat, primer, primer sealer, or primer surfacer shall be classified as an adhesion promoter.

(2) **"Aircraft Ground Support Equipment"** means any vehicle used to support aircraft activities at airports, including, but not limited to, engine stands, corrosion control stands, hydraulic test stands, maintenance stands, prop dollies, nitrogen and oxygen carts, gas turbines, crash dollies, air conditioning units, light stands, bomb racks, luggage carriers, auxiliary power units, and aircraft boarding ramps.

(3) **"Antiglare/Safety Coating"** means a low gloss coating which shows a reflectance of 25 or less on a 60° gloss meter and is formulated to eliminate glare for safety purposes on interior surfaces of a vehicle.

(4) **"Bedliner Coating"** means an expandable polymeric foam that is applied to motor vehicles or mobile equipment for abrasion protection. A coating shall not be classified as a bedliner coating if it can also be classified as a topcoat or as part of a multistage topcoat system.

(5) **"Bicycle"** means a device upon which any person may ride, propelled exclusively by human power through a belt, chain, or gears, and having one or more wheels.

(6) **"Body Filler"** means a coating applied to the vehicle body for the purposes of filling in dents or imperfections. A coating shall not be classified as a body filler if it can also be classified as a primer surfacer.

(7) **"Bright Metal Trim Repair Coating"** means a coating applied directly to a metal-plated surface to restore the surface to its original luster and texture.

(8) **"Camouflage Coating"** means a coating applied on motor vehicles or mobile equipment to conceal such vehicles or equipment from detection and/or to provide resistance to chemical agents.

(9) **"Coating"** means a VOC containing material which can be applied to a surface and which forms a solid continuous film in order to beautify and/or protect the surface. This includes, but is not limited to, any primer, paint, varnish, stain, lacquer, enamel, shellac, sealer or maskant, but excludes adhesive.

(10) **"Coating Line"** means the equipment required to apply, dry, cure, and/or bake coatings and associated flash-off areas which is operated in an uninterrupted series in a motor vehicle or mobile equipment refinishing operation.

(11) **"Coating Additive"** means any material containing VOCs that is mixed with a coating material to modify the coating material properties, except thinners and reducers. Coating additives include, but are not limited to, catalysts, retarders, accelerators, hardeners, activators, plasticizers, flex agents, elastomeric additives, antisilicone agents, fisheye preventers, flop adjusters, texture additives, and flattening agents.

(12) **"Color Match"** means the ability of a repair coating to blend into an existing coating so that color difference is not visible.

(13) **"Dip Coat"** means a coating application method accomplished by dipping an object into a coating.

(14) **"Elastomeric Material"** means a coating specifically formulated for application over flexible composite substrates, including but not limited to, filler panels, elastomeric bumpers, and spoilers.

(15) **"Electrostatic Application"** means the application of charged atomized coating droplets which are deposited by electrostatic attraction.

- (16) **"Exempt Compound"** means the same as defined in Rule 2.
- (17) **"Existing Equipment"** means any coating equipment for which a District Authority to Construct or Permit to Operate was issued before *November 13, 1996*.
- (18) **"Finishing"** means the original coating of motor vehicles, mobile equipment, bicycles, nonmotorized models, or their component parts, excluding coating performed at an OEM plant.
- (19) **"Flow Coat"** means a coating application method accomplished by flowing a stream of coating over an object.
- (20) **"Graphic Design Application"** means the application of logos, letters, numbers, and graphics to a painted surface.
- (21) **"Group I Vehicles"** means nonmotorized models, bicycles, recreational vehicles, and private or commercial passenger cars, large/heavy duty truck cabs and chassis, light and medium duty trucks and vans, buses, and motorcycles.
- (22) **"Group II Vehicles and Equipment"** means public transit buses and mobile equipment.
- (23) **"Hand Application Method"** means a coating application method accomplished by applying a coating by manually held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, rags, and sponges.
- (24) **"High-Volume Low-Pressure (HVLV) Spray"** means a coating application method using a spray applicator and pressurized air which is designed to be operated and which is operated at a permanent atomizing pressure between 0.1 and 10.0 psig, measured dynamically at the center of the applicator's air cap and at the applicator's air horns.
- (25) **"Low VOC Primer or Primer Surfacer"** means a primer or primer surfacer with a VOC content of not more than 250 grams per liter, as applied, less water and exempt compounds.
- (26) **"Metallic/Iridescent Topcoat"** means any topcoat which contains more than 5 grams per liter (0.042 lb/gal) of metal or iridescent particles, as applied, where such particles are visible in the dried film.
- (27) **"Military Vehicles"** means any vehicles operated by the United States armed forces or National Guard, including, but not limited to, tanks, trucks, tractors, trailers, vans, armored personnel carriers, and artillery pieces.
- (28) **"Mobile Equipment"** means any vehicles or equipment, except Group I vehicles, which may be drawn or are capable of being driven on a roadway or rails,

including, but not limited to, truck bodies, truck trailers, utility bodies, camper shells, locomotives, railcars, trolleys, military vehicles, aircraft ground support equipment, mobile cranes, bulldozers, street cleaners, golf carts, and implements of husbandry.

(29) **"Mobile Home"** means a vehicle other than a motor vehicle that is designed for human habitation or for human occupancy for industrial, professional or commercial purposes and for being drawn by a motor vehicle and that is in excess of 8.5 feet in width or in excess of 40 feet in overall length measured from the foremost point of the trailer hitch to the rear extremity of the vehicle. Mobile homes do not include recreational vehicles or busses.

(30) **"Motor Vehicle"** means a vehicle which is self-propelled, excluding self-propelled wheelchairs, invalid tricycles, or invalid quadricycles.

(31) **"Motor Vehicle and Mobile Equipment Refinishing Operation"** means the finishing or refinishing of Group I vehicles and Group II vehicles and equipment, including component parts.

(32) **"Multicolored Topcoat"** means a single stage topcoat that exhibits more than one color when applied and that is packaged in a single container.

(33) **"Multicomponent Coating"** means a coating mixed on site from components packaged separately. Coating components include, but are not limited to, thinners/reducers, base components, curing agents, reactive diluents, and coating additives.

(34) **"Multistage Topcoat"** means a topcoat system consisting of either two coating stages (pigmented basecoat, and clear coat), three coating stages (pigmented basecoat, translucent midcoat and clearcoat), or four coating stages (pigmented groundcoat or pigmented primer sealer, pigmented basecoat, translucent midcoat, and clearcoat). Coating stages using the same topcoat or topcoats that differ solely by the addition or removal of thinners, reducers, or coating additives are counted as a single stage for purposes of defining a multistage topcoat. The average VOC content of multistage topcoats shall be used to determine compliance with the VOC content standards in Subsection (d)(1). The average VOC content of multistage topcoats shall be calculated as follows:

$$\text{VOC(2-stage)} = \frac{\text{VOC}_{bc} + 2 \text{VOC}_{cc}}{3}$$

$$\text{VOC(3-stage)} = \frac{\text{VOC}_{bc} + \text{VOC}_{mc} + 2 \text{VOC}_{cc}}{4}$$

$$\text{VOC(4-stage)} = \frac{\text{VOC}_{gc} + \text{VOC}_{bc} + \text{VOC}_{mc} + 2 \text{VOC}_{cc}}{5}$$

where:

- VOC(2-stage) = the average VOC content, as applied, of a two-stage coating system.
- VOC(3-stage) = the average VOC content, as applied, of a three-stage coating system.
- VOC(4-stage) = the average VOC content, as applied, of a four-stage coating system.
- VOC<sub>bc</sub> = the VOC content, as applied, of a basecoat.
- 2 VOC<sub>cc</sub> = two times the VOC content, as applied, of a clearcoat.
- VOC<sub>mc</sub> = the VOC content, as applied, of a midcoat.
- VOC<sub>gc</sub> = the VOC content, as applied, of a groundcoat.

and VOC(2-stage), VOC(3-stage), VOC(4-stage), VOC<sub>bc</sub>, 2 VOC<sub>cc</sub>, VOC<sub>mc</sub>, VOC<sub>gc</sub> have units of weight per volume of coating less water and exempt compounds.

(35) "**Non-motorized Model**" means a nonmotorized vehicle designed to represent a new concept of future motor vehicles for display purposes.

(36) "**Precoat**" means any coating which is applied to bare metal prior to application of a low VOC primer or primer surfacer and which dries by oxidation or polymerization.

(37) "**Pretreatment Coating (Wash Primer)**" means any coating which contains at least one-half percent by weight of acid to provide surface etching, and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.

(38) "**Primer**" means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and adhesion of the topcoat.

(39) "**Primer Sealer**" means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, color uniformity, and to promote the ability of an undercoat to resist penetration by the topcoat.

(40) "**Primer Surfacer**" means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and adhesion of the topcoat, and which promotes a uniform surface by filling in surface imperfections.

(41) "**Refinishing**" means any coating of motor vehicles, mobile equipment, bicycles, or nonmotorized models, including partial body collision repairs, for the purpose of protection or beautification and which is subsequent to the original coating applied at an OEM plant coating line.

(42) "**Restoring**" means any coating of motor vehicles for the purpose of bringing the vehicles back to the exact original state that existed when the vehicles were delivered from the OEM plant.

(43) "**Roll Coat**" means a coating application method accomplished by rolling a coating onto a flat surface using a roll applicator.

(44) "**Specialty Coating**" means a coating which is necessary due to unusual job performance requirements and contains VOC in excess of the limits for topcoats specified for Group I vehicles or Group II vehicles and equipment. Such coatings include, but are not limited to, adhesion promoters, uniform finish blenders, elastomeric material, bright metal trim repair coatings, and anti-glare/safety coatings.

(45) "**Stationary Source**" means the same as defined in Rule 2.

(46) "**Temporary Protective Coating**" means a coating that is applied to protect areas adjacent to the area being finished or refinished from coating overspray and that is removed after the primer or topcoat is applied.

(47) "**Thinner (Reducer)**" means any solvent used to reduce the viscosity of a coating, to improve the ability of applying the coating, to achieve appropriate flash, or to achieve necessary appearance properties in the coating.

(48) "**Topcoat**" means any coating applied over a primer or an original OEM finish for the purpose of protection or appearance. Any multistage coating system shall be considered a topcoat.

(49) "**Topcoat Sealant**" means a nonpigmented coating applied over a topcoat or over an original OEM finish for the purpose of protection or appearance that requires periodic replacement, including waxes, polytetrafluoroethylene coatings, and silicone coatings. A coating shall not be classified as a topcoat sealant if it can also be classified as a topcoat or part of a multistage topcoat system.

(50) "**Touch-up Coating**" means a coating applied by brush or by handheld, non-refillable aerosol cans that is used to cover minor imperfections.

(51) "**Transfer Efficiency**" means the ratio of the weight or volume of coating solids adhering to the part being coated to the weight or volume of coating solids applied in the application process, expressed as a percentage.

(52) "**Underbody Coating**" means a coating that is applied over a topcoat to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of motor vehicles or mobile equipment for the purposes of protection or noise reduction. A coating shall not be classified as an underbody coating if it can also be classified as a topcoat or part of a multistage topcoat system.

(53) "**Uniform Finish Blender**" means a thinner or low solids coating applied in spot or panel repairs for the purpose of blending a paint overspray area of a repaired topcoat to match the appearance of an adjacent existing topcoat.

(54) **"Utility Body"** means a special purpose service compartment or unit that will be bolted, welded, or affixed onto an existing cab and chassis. The compartment may serve as storage for equipment or parts.

(55) **"Vehicle"** means a device by which any person or property may be propelled, moved, or drawn upon a highway or stationary rails or tracks, excluding any device moved exclusively by human power, except a bicycle.

(56) **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and exempt compounds which may be emitted to the atmosphere during operations or activities subject to this rule.

(57) **"Water-Based Primer and Water-Based Primer Surfacer"** means any primer or primer surfacer that contains more than 5% water by weight.

(58) **"VOC Content Per Volume of Coating, Less Water and Less Exempt Compounds"** means the same as defined in Rule 2.

(59) **"VOC Content Per Volume of Material"** means the same as defined in Rule 2.

(d) **STANDARDS**

(1) Coating VOC Limits

(i) A person shall not finish or refinish Group I vehicles, or Group II vehicles and equipment where color match is required, using any coating which has a VOC content in excess of the following limits:

<u>Coating Category</u>	<u>VOC content per volume of coating as applied, less water and less exempt compounds</u>	
	<u>gram/liter</u>	<u>(lb/gal)</u>
Pretreatment Coating	780	(6.5)
Precoat	600	(5.0)
Primer/Primer Surfacer	420	(3.5)
Primer Sealer	420	(3.5)
Topcoats		
Metallic/Iridescent	520	(4.3)
Multicolor	685	(5.7)
Multistage	540	(4.5)
Multicolor Multistage	480	(4.0)
All Other Topcoats	420	(3.5)
Specialty Coating	840	(7.0)



(ii) Color match is allowed for roll bars, truck bodies, utility bodies, and camper shells that are installed, or will be installed, on Group I vehicles. Color match is allowed for any other Group II vehicles and equipment provided that a request to allow color match is approved in writing by the Air Pollution Control Officer.

(iii) A person shall not finish or refinish Group II vehicles and equipment where color match is not required, including full body paint jobs, using any coating which has a VOC content in excess of the following limits:

<u>Coating Category</u>	<u>VOC content per volume of coating as applied, less water and less exempt compounds</u>	
	<u>gram/liter</u>	<u>(lb/gal)</u>
Pretreatment Coating	780	(6.5)
Precoat	600	(5.0)
Primer/Primer Surfacer	420	(3.5)
Primer Sealer	420	(3.5)
Topcoats		
Metallic/Iridescent	420	(3.5)
Multicolored	685	(5.7)
Camouflage Coating	420	(3.5)
All Other Topcoats	420	(3.5)
Specialty coating	840	(7.0)

(iv) A person shall not apply temporary protective coatings unless the coating contains 60 grams or less of VOC per liter of material, as applied.

(2) Precoat Usage Limitation

Use of precoats shall not exceed 25% of the aggregate volume, as applied, of all low VOC primers and primer surfacers applied at the stationary source, on a monthly basis.

(3) Specialty Coatings

Use of all specialty coatings except antiglare/safety coatings shall not exceed the larger of the following limits:

(i) Five percent by volume, as applied, of all motor vehicle and mobile equipment refinishing or finishing coatings used at the stationary source, on a monthly basis; or

(ii) Three gallons per month, as applied.

(4) Alternative Emission Control Plan

The requirements of Subsections (d)(1), (d)(2), and (d)(3) may be met using an Alternative Emission Control Plan (AECPP) that has been approved pursuant to Rule 67.1.

(5) Application Equipment

A person shall not apply any coating containing VOC to any Group I vehicles or Group II vehicles and equipment except by means of the following application methods:

- (i) Electrostatic spray application, or
- (ii) High-volume low-pressure (HVLP) spray, or
- (iii) Flow coat application, or
- (iv) Dip coat application, or
- (v) Roll coat, or
- (vi) Hand application methods, or

(vii) Other coating application methods that are demonstrated to have transfer efficiency at least equal to one of the above application methods, and which are used in such a manner that the operating parameters under which they were demonstrated to achieve such transfer efficiency are permanent features of the method. Such coating application methods shall be approved in writing prior to use by the Air Pollution Control Officer.

(6) Surface Preparation Materials

(i) A person shall not use any material for surface preparation, excluding surface preparation of replacement plastic parts, unless:

(A) The material contains 200 grams or less of VOC per liter of material (1.67 lb/gal), as applied; or

(B) The material has an initial boiling point of 190°C (374°F) or greater; or

(C) The material has a total VOC vapor pressure of 20 mm Hg or less, at 20°C (68°F).

(ii) A person shall not use any material for surface preparation of replacement plastic parts unless it contains 780 grams or less of VOC per liter of material (6.5 lb/gal), as applied, or has a total vapor pressure of VOC of 45 mm Hg or less at 68°F (20°C).

(7) Application Equipment Cleaning

A person shall not use VOC-containing materials to clean coating application equipment used in motor vehicle and mobile equipment refinishing operations unless:

(i) The cleaning material contains 200 grams or less of VOC per liter of material; or

(ii) The cleaning material has an initial boiling point of 190°C (374°F) or greater; or

(iii) The cleaning material has a total VOC vapor pressure of 20 mm Hg or less, at 20°C (68°F); or

(iv) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or

(v) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or

(vi) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes; or

(vii) Other application equipment cleaning methods that are demonstrated to be as effective as any of the equipment described above in minimizing the emissions of VOC to the atmosphere, provided that the device has been approved prior to use by the Air Pollution Control Officer.

(8) Waste Disposal

A person shall not use spray application equipment or any other means to dispose of waste coatings, coating components, surface preparation materials, or cleaning materials into the air, except when momentarily purging coating material from a spray applicator cap immediately before or after applying the coating material.

(9) Prohibition of Specification

A person shall not solicit or require the use, or specify the application, of a coating on Group I vehicles or Group II vehicles and equipment if such use or application results in a violation of any provision of this rule. This prohibition is applicable to any written or oral contract under the terms of which any coating subject to this rule is to be applied to any motor vehicle or mobile equipment within San Diego County.

(10) Manufacturer and Supplier Information Requirements:

Any person who manufactures, sells, offers for sale, or supplies any coating, thinner, coating additive, surface preparation material, or cleaning material for use in motor vehicle and mobile equipment refinishing operations in San Diego County shall provide in writing the following information to customers:

(i) The manufacturer and manufacturer identification of each coating or multicomponent coating component, surface preparation material, and equipment cleaning material; and

(ii) The manufacturer recommended mix ratio of components of each coating; and

(iii) For each coating or multicomponent coating component, the weight of VOC per volume of coating less water and exempt compounds and per volume of material (expressed in grams per liter or pounds per gallon), as sold; and

(iv) For each coating, the weight of VOC per volume of coating less water and exempt compounds (expressed in grams per liter or pounds per gallon) for each coating as applied according to the manufacturer's recommendation; and

(v) For each surface preparation or equipment cleaning material, the weight of VOC per volume of material ( in grams per liter or pounds per gallon), the total vapor pressure, or initial boiling point, as applicable.

**(e) CONTROL EQUIPMENT**

(1) In lieu of complying with the provisions of Subsections (d)(1), (d)(2), (d)(3), (d)(5), (d)(6), or (d)(7), or any combination thereof, a person may elect to use an air pollution control system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Includes an emission collection system which captures the organic gaseous emissions generated from coating, surface preparation, and/or cleaning operations, as applicable, and transports the captured emissions to an air pollution control device; and

(iii) Has an overall control efficiency of at least 85% by weight.

(2) A person electing to use an air pollution control system pursuant to Subsection (e)(1) shall submit an Operation and Maintenance Plan for the air pollution control device and emission collection system to the Air Pollution Control Officer for approval and receive such approval prior to operation of the air pollution control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. The Operation and Maintenance Plan shall:

(i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii) such as temperatures, pressures, or flow rates; and

- (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.

Upon approval of the Operation and Maintenance Plan by the Air Pollution Control Officer, the person shall comply with the provisions of the approved plan thereafter.

**(f) RECORDKEEPING**

All records shall be retained on site for at least three years and made readily available to the District upon request. Any person subject to the provisions of this rule shall maintain records, as applicable, in accordance with the following:

**(1) Coating Operations**

Any person subject to the provisions of Subsections (d)(1), (d)(2), (d)(3), (d)(6), or (d)(7), or any combination thereof, shall maintain records in accordance with the following:

- (i) Maintain a current list of coatings, coating additives, thinners, surface preparation materials and equipment cleaning materials in use. This list shall provide all the data necessary to evaluate compliance, including, but not limited to:

- (A) Type and applicable coating category specified in Subsection (d)(1) of each coating used, including manufacturer and manufacturer identification.

- (B) Identification of all low VOC primers or primer surfacers as defined in Subsection (c)(25), if any.

- (C) Type of each coating additive, thinner, surface preparation material, and equipment cleaning material used, including manufacturer and manufacturer identification.

- (ii) Maintain monthly or daily records showing the manufacturer and manufacturer identification and the amount of each coating or coating component used, the actual mix ratio of components used in each coating, the type (Group I or Group II) of motor vehicle or mobile equipment to which each coating was applied, and whether or not color match was required.

- (iii) Maintain monthly or daily records showing the manufacturer, manufacturer identification and amount of each surface preparation and equipment cleaning material used.

- (iv) Maintain a copy of the records provided by the manufacturer or supplier as specified in Subsection (d)(10).

(2) Control Equipment

Any person using control equipment pursuant to Section (e) of this rule shall:

- (i) Maintain records in accordance with Subsection (f)(1); and
- (ii) For all coating, cleaning, and/or surface preparation materials not in compliance with Subsections (d)(1), (d)(6), or (d)(7), maintain daily records of the amount of each coating or each coating component for multicomponent coatings, surface preparation and cleaning material used; and
- (iii) Maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan. Such records shall be sufficient to document continuous compliance with Subsection (e)(1)(iii) during periods of emission producing activities.

(3) Manufacturer and Supplier Sales

Any person subject to the provisions of Subsection (d)(10) shall maintain records of all coatings, thinners, coating additives, surface preparation materials, or cleaning materials sold for use in, or delivery to, San Diego County. For each material sold, these records shall show the name and business address of the purchaser, the material manufacturer and manufacturer identification, and the amount of material sold.

(g) **TEST METHODS**

(1) Measurements of the VOC content of coatings subject to Subsection (d)(1), surface preparation materials subject to Subsection (d)(6), and cleaning materials subject to Subsection (d)(7) shall be conducted and reported in accordance with EPA Test Method 24 (40 CFR 60, Appendix A).

(2) Perfluorocarbon (PFC) compounds and cyclic, branched, or linear completely methylated siloxanes (VMS) shall be assumed to be absent from a coating, cleaning, or surface preparation material subject to this rule unless a manufacturer of the material or a facility operator identifies the specific individual compound(s) and the amount(s) present in the material and provides an EPA and ARB approved test method which can be used to quantify the specific compounds.

(3) Measurements of the content of metal, other than aluminum, or iridescent particles in metallic/iridescent topcoat as defined in Subsection (c)(26) shall be conducted in accordance with South Coast Air Quality Management District (SCAQMD) Test Method 311-91, "Analysis of Percent Metal in Metallic Coatings by Spectrographic Method". Measurements of the content of elemental aluminum in metallic/iridescent topcoats as defined in Subsection (c)(26) shall be conducted in accordance with the SCAQMD Test Method 318-95 " Analysis of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction".

(4) Measurements of acid content of pretreatment coating as defined in Subsection (c)(37) shall be conducted in accordance with ASTM Standard Test Method D 1613-91 for Determination of Acidity in Volatile Solvents and Intermediates Used in Paint, Varnish, Lacquer and Related Products.

(5) Measurements of the reflectance of anti-glare/safety coating as defined in Subsection (c)(3) shall be conducted in accordance with ASTM Standard Test Method D 523-89 for Specular Gloss.

(6) Calculation of total VOC vapor pressure of surface preparation materials subject to Subsection (d)(6) and cleaning materials subject to Subsection (d)(7) shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures". If the calculated vapor pressure of the liquid mixture exceeds the limit specified in Subsections (d)(6) or (d)(7), as applicable, then measurements of the vapor pressure shall be conducted in accordance with ASTM Standard Test Method D 2879-86. The solvent composition shall be determined using one of the following ASTM standard recommended practices: E168-92, E169-93, or E260-91. Measurements of the fraction of water and exempt compounds in the liquid phase shall be conducted in accordance with ASTM Standard Test Methods D 3792-91 and D 4457-85, respectively, and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM Standard Test Method D 2879-86 shall be corrected for the partial pressure of water and exempt compounds.

(7) Measurements of the initial boiling point of cleaning and surface preparation materials subject to Subsection (d)(6) or (d)(7) shall be conducted in accordance with ASTM Standard Test Method D1078-86 for the distillation range of volatile organic liquids.

(8) Measurements of solvent losses from alternative application cleaning equipment subject to Subsection (d)(7)(vii) shall be conducted and reported in accordance with the South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems".

(9) Measurements of transfer efficiency pursuant to Subsection (d)(5)(vii) shall be conducted in accordance with the South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User".

(10) The overall control efficiency pursuant to Subsection (e)(1)(iii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Methods 18 and 25 or 25A (40 CFR 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency", January 9, 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as determined by the Air Pollution Control Officer may be used as indicators of the performance of the emission collection system.

(h) **COMPLIANCE SCHEDULE**

(1) Any person operating existing equipment who is electing to use control equipment to comply with one or more of the requirements of Subsections (d)(1) through (d)(7) shall meet the following increments of progress:

(i) By *August 13, 1997*, submit to the Air Pollution Control Officer an application for Authority to Construct and Permit to Operate an air pollution control system meeting the requirements of Section (e).

(ii) By *May 13, 1998*, issue purchase orders for the basic control device and other long delivery time components necessary to comply with Section (e).

(iii) By *May 13, 1999*, demonstrate compliance with Section (e).

(2) Any person installing new equipment who is electing to use add-on controls to comply with one or more of the requirements of Subsections (d)(1) through (d)(7) shall comply with the provisions of Section (e) at startup.