

## RULE 1115

### Metal Parts & Products Coating Operations

#### (A) General

##### (1) Purpose

- (a) The purpose of this Rule is to limit the emission of Volatile Organic Compounds from the coating of Metal Parts and Products.

##### (2) Applicability

- (a) This Rule shall apply to all metal coating operations, except those performed on Aircraft or Aerospace Vehicles; Magnet Wire; Metal Containers, Closures and Coils; marine vessel exteriors; Motor Vehicles; Motor Vehicle Assembly Lines; Mobile Equipment; or those operations subject to the coating provisions of any other source-specific rule of the District.
- (b) 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](#).

#### (B) Definitions

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

- (1) "Adhesive" - Any substance that is used to bond surfaces together by adhesion.
- (2) "Aerosol Coating Product" - A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications.
- (3) "Air Pollution Control Officer" (APCO) - The person appointed to the position of Air Pollution Control Officer of the District pursuant to the provisions of California [Health & Safety Code §40750](#), and his or her designee.

- (4) "Aircraft or Aerospace Vehicle" - Any fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle.
- (5) "Air-dried Coating" - A coating that is cured at a temperature below 90<sup>°</sup>C (194<sup>°</sup>F).
- (6) "Assembly Line" - An arrangement of industrial equipment and workers in which the product passes from one specialized operation to another until complete, either by automatic or manual means.
- (7) "Baked Coating" - A coating that is cured at a temperature at or above 90<sup>°</sup>C (194<sup>°</sup>F).
- (8) "Camouflage Coating" - A coating used, principally by the military, to conceal equipment from detection
- (9) "California Air Resources Board" (CARB) - The California State Air Resources Board the powers and duties of which are described in Part 2 of Division 26 of the California Health & Safety Code (commencing with Section 39500).
- (10) "Clear Coating" - A coating that either lacks color and opacity, or is transparent, and uses the surface to which it is applied as a reflective base or undertone color.
- (11) "Closure" - Any component which is used to close or seal a filled can, jar or bottle.
- (12) "Coating" - A material which is applied to a surface and which forms a continuous film in order to beautify and/or protect such surface.
- (13) "Coil" - Any flat metal sheet or strip that is rolled or wound in concentric rings.
- (14) "Combined Efficiency" - The capture efficiency multiplied by the control device efficiency, expressed as an overall weight percent.
- (15) "Compliance Assurance Monitoring" - Total equipment, mechanism(s), and/or technique(s) used to demonstrate and insure compliance with the control device efficiency requirements stipulated in subsection (C)(3) of this Rule. Such monitoring is used to analyze and/or provide a permanent record of process parameters, such as temperatures, pressures and flow rates.

- (16) "Contract Painter" - A non-manufacturer of Metal Parts and Products who applies coatings to such products at his facility exclusively under contract with one or more parties that operate under separate ownership and control.
- (17) "Control Device" - Equipment used to reduce, by destruction or removal, the amount of air pollutant(s) in an air stream prior to discharge to the ambient air.
- (18) "District" - The Mojave Desert Air Quality Management District the geographical area of which is described in District Rule 103.
- (19) "Drum" - Any cylindrical metal shipping container of 13 to 110 gallon capacity.
- (20) "Electric-insulating Varnish" - A non-convertible-type coating applied to electrical motors or components of electrical motors.
- (21) "Etching Filler" - A coating that contains less than 23 percent solids by weight and at least 1/2 percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer.
- (22) "Extreme high-gloss Coating" - A coating which, when tested by the American Society for Testing Material (ASTM) Method D-523 adopted in 1980, shows a reflectance of 75 percent or more on a 60<sup>N</sup> meter.
- (23) "Extreme-performance Coating" - A coating used on a metal surface where the coated surface is, in its intended use, exposed to any of the following:
- (a) Industrial-grade detergents, cleaners, or abrasive scouring agents;
  - (b) Frequent or chronic exposure to salt water, corrosives, caustics, acids, oxidizing agents, chemicals, chemical fumes, chemical mixtures or solutions; or
  - (c) Other similar environmental conditions as determined in writing by the District's APCO, pursuant to subsection (E)(2) of this Rule.
- (24) "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 when calculated by the following equation:

$$\text{Grams of VOC per liter of coating less water and less exempt compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:  $W_s$  = weight of volatile compounds in grams, including water

and exempt compounds  
 $W_w$  = weight of water in grams  
 $W_{es}$  = weight of exempt compounds in grams  
 $V_m$  = volume of material in liters, including water and exempt compounds  
 $V_w$  = volume of water in liters  
 $V_{es}$  = volume of exempt compounds in liters

- (25) "Grams of VOC per liter of material" - The weight of VOC per volume of material when 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, including water and exempt compounds  
 $W_w$  = weight of water in grams  
 $W_{es}$  = weight of exempt compounds in grams  
 $V_m$  = volume of material in liters, including water and exempt compounds

- (26) "Hand Application Methods" - The application of coatings by manually held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags and sponges.
- (27) "Heat-resistant Coating" - A coating that must withstand a temperature of at least 400 °F (204 °C) during normal use.
- (28) "High-gloss Coating" - A coating which, when tested in accordance with ASTM Method D-523 adopted in 1989, shows a reflectance of 85 percent or more on a 60° meter.
- (29) "High-performance Architectural Coating" - A coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 605.2-1980.
- (30) "High-temperature Coating" - A coating that is certified to withstand a temperature of 1000°F for 24 hours.
- (31) "High-Volume, Low-Pressure (HVL) Spray" - Equipment used to apply coatings by means of a gun which operates at a permanent pressure of between 0.1 and 10 psig, measured at the air cap of the coating application system, and a permanent liquid coating pressure of not more than 50 psig.

- (32) "Ink" - A fluid that contains dyes and/or colorants and is used to make markings but not to protect surfaces.
- (33) "Magnetic Data Storage Disk Coating" - A coating used on a metal disk which stores data magnetically.
- (34) "Magnet Wire" - Wire used in electro-magnetic field application in electrical equipment, such as transformers, motors, generators, and magnetic tape recorders.
- (35) "Metal Container, Closure and Coil Coating Operations" - The application of any VOC-containing coating to the surfaces of metal cans, Drums, Pails, lids, Closures, or to the surface of flat metal sheets, strips, rolls, or Coils during the manufacturing and/or reconditioning process.
- (36) "Metal Parts and Products" - Any components or complete units fabricated from metal, excluding Aircraft or Aerospace Vehicles, Magnet Wire, Metal Containers, Closures and Coils, marine vessel exteriors, Motor Vehicles, Motor Vehicle Assembly Lines, Mobile Equipment or those subject to the coating provisions of any other source-specific rule of the District.
- (37) "Metallic Coating" - A coating which contains more than 5 grams of metal per liter of coating, as applied.
- (38) "Military Specification Coating" - A coating applied to Metal Parts and Products and which has a paint formulation approved by a United States Military Agency for use on military equipment.
- (39) "Mobile Equipment" - Any equipment which may be drawn or is capable of being driven on a roadway, including, but not limited to, truck bodies, truck trailers, camper shells, mobile cranes, bulldozers, street cleaners, golf carts and implements of husbandry.
- (40) "Mold-seal Coating" - The initial coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.
- (41) "Motor Vehicle" - A passenger vehicle, light-duty truck, medium-duty vehicle, or a heavy-duty vehicle as defined in Section 415 of the California Vehicle Code.
- (42) "Motor Vehicle Rework" - The reconditioning of Motor Vehicles.
- (43) "Pail" - Any cylindrical metal shipping container of at least 1 but less than 13 gallon capacity and constructed of 29 gauge or heavier material.

- (44) "Pan-backing Coating" - A coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.
- (45) "Performance Test" - A test conducted primarily for the purpose of researching and developing new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not involved in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner.
- (46) "Prefabricated Architectural Component Coatings" - Coatings applied to Metal Parts and Products which are to be used as an architectural structure.
- (47) "Pretreatment Wash Primer" - Any coating which contains a minimum of 0.5 percent acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- (48) "Repair Coating" - A coating used to recoat portions of a product which has sustained mechanical damage to the original coating following normal painting operations.
- (49) "Safety-indicating Coating" - A coating which changes physical characteristics, such as color, to indicate unsafe conditions.
- (50) "Silicone-release Coating" - Any coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans.
- (51) "Solar-absorbent Coating" - A coating which has as its primary purpose the absorption of solar radiation.
- (52) "Solid-film Lubricant" - Any very thin coating consisting of a binder system, containing primarily one or more of molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids which act as dry lubricants between faying surfaces.
- (53) "Stencil Coating" - An ink or a coating which is rolled or brushed onto a template or stamp for the purpose of adding identifying letters, numbers and/or other markings to Metal Parts and Products.
- (54) "Surface Preparation" - The removal of contaminants, including dust, oil and grease, prior to coating applications.

- (55) "Textured Finish" - Any rough surface produced by spraying large drops of coating onto a previously coated surface.
- (56) "Theoretical Potential Emissions" - The maximum capacity of a stationary source to emit a regulated air pollutant, based on the greater of design capacity or maximum production (based on 8760 hours/year), before add on controls.
- (57) "Touch-up Coating" - A coating applied by brush or hand-held, non-refillable aerosol cans to repair minor surface damage and imperfections.
- (58) "Transfer Efficiency" - The ratio of the weight or volume of coating solids adhering to an object to the total weight or volume of coating solids used in the application process, expressed as a percentage.
- (59) "United States Environmental Protection Agency" (USEPA) - The United States Environmental Protection Agency, the Administrator of the USEPA and his or her authorized representative.
- (60) "Vacuum-metalizing Coating" - The undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film.
- (61) "Volatile Organic Compound (VOC)" - Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and those compounds listed in [40 CFR 51.100\(s\)\(1\)](#).

## (C) Requirements

- (1) Transfer Efficiency
  - (a) A person shall not apply any coatings to Metal Parts and Products subject to the provisions of this Rule, unless the coating is applied with equipment properly operated according to manufacturer's suggested guidelines, and using one of the following application methods:
    - (i) Electrostatic attraction; or
    - (ii) High Volume Low Pressure (HVLV) Spray equipment; or
    - (iii) Dip coat; or
    - (iv) Hand Application Methods; or
    - (v) Other coating application methods as are demonstrated to have a Transfer Efficiency at least equal to one of the above methods, and which are used in such a manner that the parameters under which

they were tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the APCO.

(2) VOC Content of Coatings:

(a) A person shall not apply any coating to Metal Parts and Products, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contains VOC in excess of the limits specified in subsection (C)(2)(a)(i) below:

(i) **COATING LIMITS**

(Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds)

<u>Coating Category</u>	<u>Air-Dried</u>		<u>Baked</u>	
	g/L	lb/gal	g/L	lb/gal
General	420	(3.5)	360	(3.0)
Military Specification	420	(3.5)	360	(3.0)
Etching Filler	420	(3.5)	420	(3.5)
Solar-Absorbent	420	(3.5)	360	(3.0)
Heat-Resistant	420	(3.5)	360	(3.0)
High-Gloss	420	(3.5)	360	(3.0)
Extreme High-Gloss	420	(3.5)	360	(3.0)
Metallic	420	(3.5)	420	(3.5)
Extreme-Performance	420	(3.5)	360	(3.0)
<b>Prefabricated Architectural</b>				
Component	420	(3.5)	275	(2.3)
Touch-Up	420	(3.5)	360	(3.0)
Repair	420	(3.5)	360	(3.0)

<u>Coating Category</u>	<u>Air-Dried</u>		<u>Baked</u>	
	g/L	lb/gal	g/L	lb/gal
Silicone-Release	420	(3.5)	420	(3.5)
High-Performance				
Architectural	420	(3.5)	420	(3.5)
Camouflage	420	(3.5)	420	(3.5)
Vacuum-Metalizing	420	(3.5)	420	(3.5)
Mold-Seal	420	(3.5)	420	(3.5)
High-Temperature	420	(3.5)	420	(3.5)
Electric-Insulating Varnish	420	(3.5)	420	(3.5)
Pan-Backing	420	(3.5)	420	(3.5)
Pretreatment Wash Primer	420	(3.5)	420	(3.5)
Clear Coating	520	(4.3)	520	(4.3)

(b) The provisions of subsection (C)(2)(a)(i) above shall not apply to Extreme Performance Coatings used at military installations and subject to the provisions of this Rule until April 22, 1998. In the interim, a person shall not apply any Extreme Performance Coating at such installations which contains VOC in excess of the following limits, after the specified date:

(i) On or after April 22, 1996:

<u>Air-Dried</u>		<u>Baked</u>	
g/L	lb/gal	g/L	lb/gal
588	(4.9)	588	(4.9)

(ii) Any person seeking the use an Extreme Performance coating subject to the provisions specified in this subsection shall submit an Extreme Performance Coating Petition, pursuant to the requirements of subsection (E)(2).

(3) Add-On Control Alternative

- (a) In lieu of complying with the VOC content limitations in subsection (C)(2) above, air pollution control equipment with a capture and control system Combined Efficiency of at least 85%, as determined pursuant to subsections (G)(2)(g) and (G)(2)(h) of this Rule, may be used.

(4) Surface Preparation and Cleanup Solvent

- (a) The requirements of this Section shall apply to any person using solvent for Surface Preparation, cleanup, and paint removal, including paint spray equipment.
- (b) A person shall not use VOC-containing materials for the cleanup of application equipment used in coating operations, unless such material is collected in a closed container when not in use; and
  - (i) The application equipment is disassembled and cleaned in an enclosed system during the washing, rinsing and draining processes; or
  - (ii) 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
  - (iii) Other application equipment cleaning methods that are demonstrated to be as effective as the equipment described above in minimizing emissions of VOC to the atmosphere are used, provided that the device has been approved in writing prior to use by the APCO.
- (c) A person shall not use VOC-containing materials for Surface Preparation unless:
  - (i) The material contains 200 grams or less of VOC per liter of material (1.67 pounds per gallon); or
  - (ii) The material has an initial boiling point of 190°C (374°F) or greater; or
  - (iii) The material has a total VOC vapor pressure of 20 mm Hg or less, at 20°C (68°F).
- (d) A person shall use closed, nonabsorbent containers for the storage or disposal of cloth, paper, or any other absorbent material used for solvent Surface Preparation and cleanup.

- (5) Prohibition of Specifications: A person shall not specify the use in the District of any coating to be applied to any metal parts and products subject to the provisions of this Rule, that does not meet the limits and requirements of this Rule.
- (6) Compliance Statement Requirement:
  - (a) The manufacturer of coatings subject to this Rule shall provide on coating containers or on separate data sheets the designation of VOC content as supplied, including coating constituents. The VOC content shall be expressed in grams per liter or pounds per gallon, excluding water and exempt solvents.
- (7) Compliance Assurance Monitoring
  - (a) Any coating operation subject to subsection (C)(3) shall utilize Compliance Assurance Monitoring, as approved by the APCO, for any add-on Control Device used to meet the control requirement.
  - (b) Records of the monitoring device(s), mechanisms and/or techniques, and other data necessary to demonstrate compliance with the control requirements, shall be maintained and produced upon request of the APCO, pursuant to Section (F).
  - (c) Compliance with the add-on control requirements stipulated in subsection (C)(3) shall be determined by source testing and/or evaluating Compliance Assurance Monitoring data.
  - (d) Each monitoring device(s), mechanism and/or technique shall be calibrated/maintained in a manner approved by the APCO.

## (D) Exemptions

- (1) The provisions of this Rule shall not apply to aerosol coating products.
- (2) The provisions of subsection (C)(2) and (C)(3) of this Rule shall not apply to any facility that does not exceed 10 tons per year Theoretical Potential Emissions of VOC, as defined in subsection (B)(56), subject to the following conditions:
  - (a) Any person claiming exemption under this paragraph shall meet the certification requirements specified in subsection (E)(1) and the recordkeeping requirements specified in Section (F); and

- (b) Any facility operating under this exemption whose emissions exceed 10 tons on an annual basis shall henceforth be subject to subsections (C)(2) and (C)(3) of this Rule.
- (3) The provisions of subsections (C)(1), (C)(2) and (C)(3) of this Rule shall not apply to:
- (a) Any facility which has a daily usage of less than one gallon of coating, including any VOC-containing materials added to the original coating as supplied by the manufacturer, subject to this Rule;
  - (b) Total noncompliant coating use per facility that does not exceed 55 gallons per year;
  - (c) Stencil Coatings
  - (d) Safety-indicating Coatings;
  - (e) Magnetic Data Storage Disk Coatings;
  - (f) Solid-film Lubricants;
  - (g) Adhesives;
  - (h) The coating of Motor Vehicle bodies at Motor Vehicle Rework facilities.
- (4) The provisions of subsection (C)(1) of this Rule shall not apply to Contract Painters while applying coatings to objects on trays, provided no object has any dimension greater than 12 inches.
- (5) The provisions of subsection (C)(1) of this Rule shall not apply to the application of Touch-up Coatings, Repair Coatings, Textured coatings, Metallic Coatings which have a metallic content of more than 30 grams per liter, Mold-seal Coatings, or to facilities that use less than three gallons of such coatings per day, as applied, including any VOC-containing materials added to the original coatings as supplied by the manufacturer.
- (6) The provisions of subsections (C)(1), (C)(2), (C)(3) and (C)(4) of this Rule shall not apply to the application of coatings and use of cleaning solvents while conducting Performance Tests on the coatings at paint manufacturing facilities.

## (E) Administrative Requirements

- (1) Certification Requirements for Facilities with Theoretical Potential Emissions of 10 Tons VOC or Less per Year:
  - (a) Any person claiming an exemption under subsection (D)(2) of this Rule shall certify the exemption on an annual basis, by:
    - (i) Submitting a written certification to the APCO certifying that the affected facility shall not emit VOCs in excess of 10 tons annually. At a minimum, the certification shall include the following information:
      1. A summary of past annual usage of VOC-containing materials and related emissions; and
      2. The facility's Theoretical Potential Emissions of VOC, as defined in subsection (B)(56).
- (2) Extreme Performance Coating Petition - Military Installations Only (Required through April 22, 1998)
  - (a) Any person seeking to use an Extreme-performance Coating in any military coating operation which is subject to the provisions of this Rule shall comply with the following requirements, prior to the application of such coating:
    - (i) A petition shall be submitted to the APCO stating the performance requirements, volume of coating, and VOC level which is attainable. Attainable VOC level must comply with the VOC limits and associated compliance dates set forth in subsection (C)(2)(b).
    - (ii) If the APCO grants written approval, such petition shall be resubmitted for approval on an annual basis. Approval of subsequent petitions shall be granted only through April 22, 1998.
    - (iii) If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.
    - (iv) Records shall be maintained pursuant to Section (F).

## (F) Monitoring and Records

- (1) Coating Records
  - (a) Any facility or person claiming exemption pursuant to subsections (D)(2), (D)(3)(a) or (D)(3)(b) shall meet the recordkeeping requirements of this Rule so as to be able to certify the exemption status.

- (b) Any person subject to subsections (C)(1), (C)(2), (C)(3), (C)(4) or (E)(1)(a) shall comply with the following requirements:
  - (i) The person shall maintain and produce a current list of coatings in use which provides all of the coating data necessary to evaluate compliance, including, but not limited to, the following information, as applicable:
    - 1. coating, catalyst, and reducer used.
    - 2. mix ratio of components used.
    - 3. VOC content of coating as applied.
  - (ii) The person shall maintain and produce records on a daily basis, by permit unit, including:
    - 1. coating and mix ratio of components used in the coating; and
    - 2. quantity of each coating applied.
  - (iii) The person shall maintain and produce records on a daily basis showing the type and amount of solvent used for cleanup, Surface Preparation, or paint removal.
- (c) Any facility or person claiming an exemption pursuant to Section (D)(2) of this Rule shall maintain and produce records of purchase orders and invoices of VOC-containing materials which specify the name of the materials in use. The requirements of this paragraph shall be in addition to all other applicable recordkeeping requirements specified in this Section.

(2) Add-on Control Equipment Records

- (a) Any person using an emission Control Device or system, pursuant to subsection (C)(3), shall maintain and produce daily records of key system operating parameters and maintenance procedures which will demonstrate continuous operation and compliance of the emissions Control Device during periods of emissions-producing activities. Key system operating parameters are those necessary to ensure compliance with VOC content of coating requirements, such as temperatures, pressures and flow rates.
- (3) All records for the previous 24 month period maintained and produced pursuant to this Section shall be retained and available for inspection by the APCO upon request.

## (G) Test Methods

- (1) A violation of the limits contained in this Rule, as determined by any one of the test methods listed below, 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) The VOC content of coatings and solvents, as specified in subsections (C)(2) and (C)(4)(c)(i), shall be analyzed as prescribed by USEPA Reference Method 24 for VOC content (without correction for exempt compounds) and ASTM D4457-85, or CARB Method 432, 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 the initial boiling point of liquid containing VOC, subject to subsection (C)(4)(c)(ii), shall be conducted in accordance with ASTM D1078-86.
  - (c) Calculation of total VOC vapor pressure for materials subject to subsection (C)(4)(c)(iii) shall be conducted in accordance with ASTM D2879-86. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM D3792-91 and D4457-85 and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM D2879-86 shall be corrected for partial pressure of water and exempt compounds.
  - (d) Measurement of solvent losses from alternative application cleaning equipment subject to (C)(4)(b)(iii) shall be conducted in accordance with the South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" (11/1/94).
  - (e) Measurement of acid content of a substance shall be determined by ASTM D1613-85.
  - (f) Measurement of metal content of coatings shall be determined in accordance with South Coast Air Quality Management District's

"Laboratory Methods of Analysis for Enforcement Samples" manual, "Determination of Percent Metal in Metallic Coatings by Spectrographic Method, Method 311".

- (g) Capture Efficiency shall be determined according to USEPA's technical document, "Guidelines for Determining Capture Efficiency" (1/9/95).
  - (h) The control efficiency of the Control Device shall be determined according to USEPA Test Methods 25, 25A or 25B for measuring the total gaseous organic concentrations at the inlet and outlet of the emissions Control Device, as contained in 40 CFR Part 60, Appendix A. USEPA Test Method 18 or CARB Method 422 shall be used to determine emissions of exempt compounds.
  - (i) Measurement of solids content by weight of a substance shall be conducted in accordance with ASTM D1475-60. 
  - (j) Alternative test methods may be used upon obtaining the approval of the APCO, CARB and USEPA.
- (3) The following test method is recommended for use in determining Transfer Efficiency of alternative application methods:
- (a) Demonstration of Transfer Efficiency of alternative application methods subject to subsection (C)(1)(a)(v) shall be conducted in accordance with South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User" (5/24/89).

[SIP: Approved 12/23/97, 62 FR 67002, effective 2/26/98, 40 CFR 52.220(c)(239)(i)(A)(2); Submitted as adopted 03/02/92 on 6/19/92.]