

RULEo SURFACEo COATINGo OFo METALo PARTSo ANDo PRODUCTSo, o PLASTICo PARTSo ANDo PRODUCTSo, ANDo PLEASUREo CRAFTSo (Adoptedo Aprilo 11, o 1991; o Amendedo Septembereo 19, o 1991; o Amendedo Mayo 21, o 1992; o Amendedo Decembereo 17, o 1992; o Amendedo Mayo 2 , o 199o; o Amendedo Septembereo 21, o 2 ; o Amendedo Decembereo 2 , o 2 1; o Amendedo Mayo 18, o 2 ; o Amendedo Septembereo 2 , o 2 7; o Amendedo Octobereo 1 o, o 2 8; o Amendedo Septembereo 17, o 2 9) o

1.o Purposeo

The purpose of this rule is to limit the emission of volatile organic compounds (VOC) from the coating of metal parts and products, large appliances and products, metal furniture, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure crafts, and from the organic solvent cleaning and storage and disposal of solvents and waste solvent materials associated with such coating. This rule also specifies the administrative and recordkeeping requirements and the test methods for determining the VOC content, the VOC emissions, the VOC capture efficiency, the acid content, the metallic residues quality of coatings, and the VOC emissions from spray gun cleaning systems.

2.o Applicabilityo

The provisions of this rule shall apply to the surface coating of metal parts and products, large appliances and products, metal furniture, and plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure crafts, and to the organic solvent cleaning, and the storage and disposal of all solvents and waste solvent materials associated with such coating.

.o Definitionso

- .1o Aerospace Vehicles: o the completed unit of any aircraft, helicopter, missile or space vehicle.
- .2o Air Dried: o a process whereby the coated object is cured or dried to ambient temperature or at a temperature below 190°F.
- .o Air Pollution Control Officer (APCO): o as defined in Rule 102 (Definitions).
- .o Antifoulant Coating: o any coating applied to the underwater portion of a pleasure craft to prevent the attachment of biological organisms, and registered with the EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 10 ).
- .5o Application Equipment: o a device, including, but not limited to, a spray gun, brush, and roller, used to apply adhesives, coatings, or inks.

- .0 ARB: California Air Resources Board.
- .70 ASTM: means ASTM International.
- .80 Baked: a process whereby the coated object is heated above ambient temperature to a temperature above 190°F for the purpose of curing or drying.
- .90 Basecoat/Clearcoat: a two-step topcoat system in which a highly pigmented, often metallic, basecoat is followed by a clearcoat, resulting in a finish with high gloss.
- .10 Bench Scale Project: a project (other than a research and development facility) that is performed on a small scale, such as one capable of being located on a laboratory benchtop.
- .110 Brush Coating: the manual application of coatings using brushes or rollers.
- .12 Business Machine: a device that uses electronic or mechanical methods to process information, perform calculations, print or copy information or convert sound into electrical impulses for transmission, including devices listed in standard industrial classification numbers 572, 570, 570, 579, and 10 and photocopy machines, a subcategory of standard industrial classification number 801.
- .10 Camouflage Coating: a coating used primarily by the military to conceal equipment from detection.
- .10 CFR: Code of Federal Regulations.
- .150 Clearcoat: a transparent coating usually applied over a colored, opaque coat to improve gloss and provide protection to the color coat below.
- .10 Clear Coating: a colorless coating which contains binders, but no pigment, and is formulated to form a transparent film.
- .170 Coating: a material applied to or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.
- .180 Coating of Plastic Parts of Automobiles and Trucks: the coating of any plastic part that is or shall be assembled with the other parts to form an automobile or truck.

- .19o Coatingo foPlasticoPartso foBusinessoMachines:otheocoatingo foanyoplasticoparto thatiso rshallbeassembledowitho therpartsfo formæbusinessmachine.o
- .2 Coils:o metalosheetso rostripsowhichæarerolledinto coilsfoforofurtherindustrialo ro commercialuse.o
- .21o ContinuousoCoating:o anoenclosedocoatingosystemowhereosprayonozzlesocoato metalopartsoandoproductsoasotheyoareoconveyedothroughotheoenclosure.o Watero washozonesocontrolotheoinletoando utleto fotheoenclosure.oExcessocoatingodrainso into arecirculationssystem.o
- .22 CuredoAdhesive,oCuredoCoating,o roCuredoInk:o anoadhesive,ocoating,o roinko thatisdryto thetouch.o
- .2 Degreaser:o atank,otray,odrumo ro theræcontainerinowhicho bjectso to becleanedo areæexposedto asolvento ræsolventovaporino rdercto removeæcontaminants.o Theo bjectso to becleanedoinclude,obutoarenotolimitedoto,oparts,oproducts,oto ls,o machinery,oandæequipment.o Anoenclosedosprayoapplicationæequipmentocleaningo systemisnotædegreaser.o
- .2 Dipocoating:o theoprocessoinowhichoaosubstrateoisoimmersedoinoasolutiono(oro dispersion)æcontainingætheæcoatingmaterial,æandæthenowithdrawn.o
- .25o Dissolver: an organic solvent that is added to an adhesive, coating, or ink in order to melt or to liquefy solid particles.
- .2 ElectricoDissipatingoCoating:o acoatingothatorapidlyodissipatesoahigh-voltageo electricæcharge.o
- .27o Electrodeposition:o adipocoatingoapplicationomethodowhereotheopaintosolidsoareo givenæanæelectricalæchargeowhichisthenæattractedto asubstrate.o
- .28o ElectrostaticoApplication:o aomethodo fosprayoapplicationo focoatingsowhereoano electrostaticopotentialoisocreatedobetweenotheopartso to becoatedoandotheopainto particles.o
- .29o EMI/RFIoShielding:oaacoatingousedo noelectricalo roelectronicoequipmentoto provideo shieldingo againto electromagnetico interference,o radio frequencyo interference,o rostaticdischarge.o
- .o EPA:o UnitedoStatesoEnvironmentaloProtectionoAgency.o
- .o1o ExemptoOrganicoCompounds:o allo rganicocompoundsonotoclassifiedoasovolatileo rganicoæcompoundso(VOC),æasdistedinRuleo1o2 (Definitions).o

- .o2 Extreme High Gloss Coating: o any coating which achieves at least 95% reflectance on a degree glossmeter when tested by ASTM D-52 -89.
- .o Extreme Performance Coating: o a coating used on a metal surface where the coated surface is, in its intended use, exposed to any of the following:
  - .o .1o Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleaners, or abrasive scouring agents; or
  - .o .2 Unprotected shipboard conditions; or
  - .o .o Temperatures consistently in excess of 250°F; or
  - .o .o Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, or chemical mixtures or solutions.
- .o Flow Coating: o a coating application system, with no air supplied to the nozzle, where paint flows over the part and the excess coating drains back into the collection system.
- .o5o Fog Coating: o a coating that is applied to a plastic part for the purpose of color matching without masking in a molded-in texture. o A fog coat shall be applied to a thickness of more than .5 mils for coating solids.
- .o Finish Primer/Surfer: o a coating applied with a wet film thickness of less than 10 mils or more prior to the application of a top coat for purposes of providing corrosion resistance, adhesion of subsequent coatings, or moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections.
- .o7o Grams of VOC per Liter of Coating Applied, Excluding Water and Exempt Compounds: o the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation: o

$$\frac{\text{Grams of VOC per Liter of Coating Applied Excluding Water and Exempt Compounds}}{1} = \frac{W_{so} + W_{wo} + W_{eco}}{V_m + V_{wo} + V_{eco}}$$

Where: o

- W<sub>so</sub> = o weight of volatile compounds, in grams
- W<sub>wo</sub> = o weight of water, in grams
- W<sub>eco</sub> = o weight of exempt compounds, in grams
- V<sub>m</sub> = o volume of material, in liters
- V<sub>wo</sub> = o volume of water, in liters

V<sub>ex</sub> = volume of exempt compounds, in liters

- .080 Grams of VOC per liter of Material: the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_{so} - W_{wo} - W_{eco}}{V_{mo}}$$

Where:

W<sub>so</sub> = weight of volatile compounds, in grams

W<sub>wo</sub> = weight of water, in grams

W<sub>eco</sub> = weight of exempt compounds, in grams

V<sub>mo</sub> = volume of material, in liters

- .090 Heat Resistant Coating: any coating, which during normal use, must withstand temperatures of at least 300 °F.
- .010 High Build Primer/Surfacer: a coating applied with a wet film thickness of 10 mils or more, prior to the application of a topcoat, for purposes of providing corrosion resistance, adhesion to subsequent coatings, or as a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections.
- .010 High Gloss Coating: any coating which achieves at least 85% reflectance on a degree gloss meter when tested by ASTM Method D-52 -89.
- .02 High Performance Architectural Coating: a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturers Association publication number AAMA 5.2-1980.
- .0 High Temperature Coating: any coating that is certified to withstand temperatures of at least 1,000 °F for 2 hours.
- .0 High-Volume, Low-Pressure (HVLP) Spray Equipment: equipment used to apply materials by means of a spray gun which is designed and intended to be operated, and which is operated, between 0.1 and 10.0 psig of air atomizing pressure, measured dynamically at the center of the air cap and the air horns.
- .050 Large Appliance Part: any organic surface-coated metal die, door, casing, or other interior or exterior metal part or accessory that is assembled to form a large appliance product.
- .0 Large Appliance Product: any organic surface-coated metal range, microwave oven, refrigerator, freezer, washer, dryer, dishwasher, water heater, or trash compactor manufactured for household, commercial, or recreational use.

- .07o Light-Duty Truck: o any truck having a manufacturer's maximum gross vehicle weight rating of 10,000 pounds or less.
- .08o Liquid Leak: o a visible solvent leak from a container or crate for more than three drops per minute, or a visible liquid mist.
- .09o Magneto Wire: o wire used in electromagnetic field applications in electrical machinery and equipment such as transformers, motors, generators, and magnetic tape recorders.
- .50 Maintenance Cleaning: o the cleaning of tools, forms, molds, jigs, machinery, and equipment (except coating application equipment, ink application equipment, or adhesive application equipment), and the cleaning of work areas where maintenance or manufacturing occurs.
- .51o Manufacturing Process: o the process of making goods or articles by hand or by machine.
- .52 Marine Vessel: o any tugboat, tanker, freighter, passenger ship, barge, or other boat, ship, or watercraft. This includes both saltwater and freshwater vessels.
- .50 Mask Coating: o a thin film coating applied through a template to coat a small portion of a substrate.
- .50 Metal Containers or Closures: o the interior or the exterior of formed metal cans, drums, pails, or crowns; or flat metal sheets which are intended to be formed into cans, drums, pails, duds, or crowns.
- .55o Metal Furniture: o includes, but is not limited to, the following types of products: o household, o office, o institutional, o laboratory, o hospital, o public building, o restaurants, o barber and beauty shop, and o dental furniture, as well as components for these products. It also includes office and store fixtures, partitions, shelving, o lockers, o dampers, and o lighting fixtures, and o waste baskets.
- .50 Metal Parts and Products: o any component or complete unit fabricated from metal, except those subject to the coating provisions of the source-specific rules.
- .57o Metallic/Iridescent Coating: o any coating which contains more than 0.2 lb/gal or 5 grams/liter of metal or iridescent particles, as applied, where such particles are visible in the dried film.
- .58o Military Specification Coating: o a coating which has a formulation approved by the United States Military Agency for use on military equipment.

- .59o MoldSealCoating: o the initial coating applied to a mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.
- .o MotorVehicle: o a vehicle which is self-propelled and is a device by which any person or property may be propelled, moved or drawn upon a highway, excepting a device moved by human power or used exclusively upon stationary rail or tracks.
- .o1o Multi-ColoredCoating: o a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.
- .o2 Multi-ComponentCoating: o a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.
- .o Non-AbsorbentContainer: o a container made of non-porous material that does not allow the migration of solvents through it.
- .o Non-AtomizedSolventFlow: o solvent in the form of a liquid stream without the introduction of any propellant.
- .o5o Non-LeakingContainer: o a container without liquid leak.
- .o NormalBusinessHours: o Monday through Friday, 8:00 am to 5:00 pm.
- .o7o One-ComponentCoating: o a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.
- .o8o OpticalCoating: o a coating applied to optical lenses.
- .o9o OrganicSolvent: o the same as "Solvent."
- .7o OrganicSolventCleaning: o as defined in Rule (Organic Solvent Cleaning, Storage, and Disposal).
- .71o PlasticPart: o a piece made from a substance that has been formed from resin through the application of pressure or heat or both.
- .72 PleasureCraft: o marine vessels which are manufactured or operated primarily for recreational purposes, leased, rented, or chartered to a person or business for recreational purposes. The owner or operator of such a vessel shall be responsible for certifying that the intended use is for recreational purposes.

- .70 Pleasure Craft Coating: any marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, or roller, or other means to a pleasure craft.
- .70 Polyester Resin Materials: material including, but not limited to, unsaturated polyester resin such as isophthalic, orthophthalic, halogenated, biphenol-A, vinyl-ester, or furan resins, cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other VOC containing material in polyester resin coating operations.
- .750 Polyester Resin Operations: methods used for the production or rework of products by mixing, pouring, hand-layup, impregnating, injecting, forming, winding, spraying, and/or curing unsaturated polyester resin material with fiberglass, fillers, or any other reinforcement materials and associated cleanup.
- .70 Pretreatment Coating or Pretreatment Wash Primer: any coating which contains no more than 12 percent solids by weight, and a minimum of one-half (0.5) percent acid by weight, is necessary to provide surface etching, and is applied directly to bare metal or fiberglass surfaces to provide corrosion resistance and adhesion.
- .770 Propellant: any gas, including air, in a pressure container for expelling the contents when the pressure is released.
- .780 Repair: recoating or portions of previously coated product to cover mechanical damage to the coating following normal painting operations.
- .790 Repair Cleaning: a solvent cleaning operation or activity carried out during a repair process.
- .80 Repair Process: the process for returning a damaged object or an object not repaired properly to good condition.
- .810 Research and Development: a facility or portion thereof used to further the development of useful materials, devices, systems, or methods, including, but not limited to, design, development, and improvement of prototypes and processes. Research and development does not include the manufacturing process itself.
- .82 Roll Coating: the application of coatings from a paint trough to a flat surface by a mechanical series of rollers.
- .80 Rolling, or Consecutive 5-Day Period: any given date plus the immediate, or previous, days.



- .80 SCAQMD: South Coast Air Quality Management District.
- .85 Scientific Instruments: instruments (including the components, assemblies, and subassemblies used in their manufacture) and associated accessories and reagents which are used for the detection, measurement, analysis, separation, synthesis, sequencing of various compounds.
- .80 Shock-Free Coating: a coating applied to electrical components to protect the user from electric shock. The coating has characteristic of having a low capacitance and high resistance, and being resistant to breaking down under a high voltage.
- .87 Silicone Release: a coating which contains silicone resin and has as its primary function the release of products from metal surfaces such as baking pans.
- .88 Solar Absorbent Coating: a coating which has as its primary purpose the absorption of solar radiation.
- .89 Solid Film Lubricant: a very thin coating consisting of a binder system containing as its chief pigment material one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between closely-fitting surfaces.
- .90 Solvent: as defined in Rule 22 (Organic Solvent Cleaning, Storage, and Disposal).
- .91 Solvent Flushing: the use of a solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of equipment by flushing solvent, by a non-atomized solvent flow, through the equipment.
- .92 Stationary Source: as defined in Rule 22.1 (New and Modified Stationary Source Review Rule).
- .90 Stencil Coating: a coating that is applied over a stencil to a plastic part to a thickness of 10 mils or less for coating solids. Stencil coating is most frequently letters, numbers, or decorative designs.
- .90 Stripping: the use of a solvent to remove materials such as cured adhesives, cured inks, cured or dried paint, cured or dried paint residue or temporary protective coating.

- .95o SurfacePreparation:o the removal of contaminants from a surface prior to the application of coatings, inks, or adhesives or before proceeding to the next step of a manufacturing process.o
- .9o TransferEfficiency:o a ratio of the amount 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.o
- .97o Thinner:o a solvent that is used to dilute coatings to reduce viscosity, color strength, and solids, or to modify drying conditions.o
- .98o Texturecoating:o a coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.o
- .99o Topcoat:o any of final coating applied to a substrate.o Several layers of topcoat may be applied in some cases.o
- .1o TouchUp:o that portion of the coating operation which is incidental to the main coating process but necessary to cover minor imperfections or to achieve coverage as required.o
- .1o1o VacuumMetalizing/PhysicalVaporDeposition(PVD):a process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.o
- .1o2 ViscosityReducer:o an organic solvent which is added to an adhesive, coating or ink to make it more fluid.o
- .1o VolatileOrganicCompounds(VOC):o as defined in Rule 1o2 (Definitions).o
- .1o WasteSolventMaterial:o any solvent which may contain dirt, oil, metal particles, sludge, and/or waste products, or wiping material containing VOC including, but not limited to, paper, cloth, sponge, rag, or cotton swab used in organic solvent cleaning.o
- .1o5o WipeCleaning:o a solvent cleaning activity performed by hand or rubbing an absorbent material such as a rag, paper, sponge, brush, or cotton swab containing solvent.o
- .o Exemptionso
  - .1o Except for large appliance parts and products, metal furniture, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations subject to Section 5.o.1, Section 5.5.1, Section 5.o.1, and Section 5.7.1, respectively, an operator or agent

stationary source may use up to a total of 55 gallons of non-compliant coatings per rolling, consecutive 5-day period. All the provisions of the rule, including application methods and administrative requirements shall apply to the use of the non-compliant coatings.

- .1.1.0 A non-compliant coating is a coating with a VOC content, as applied, in excess of the applicable VOC content limits in Sections 5.1, or 5.2.
- .1.2 The 55-gallon exemption limit is the total amount of non-compliant coatings, as applied, for all operations that would otherwise be subject to Section 5.1, or Section 5.2 VOC content limits.
- .1.0 The 55-gallon exemption limit does not apply to non-compliant coatings used in a coating operation with an APCO-approved VOC emission control system that meets the requirements of Section 5.8.
- .2 Effective until December 1, 2010, the requirements of this rule shall not apply to metal parts and products touch-up and repair coating operation. On and after January 1, 2011, touch and repair coating used on metal parts and products shall comply with the applicable VOC limits specified in Section 5.2 Table 1.
- .0 Any source which is in full compliance with the provisions of this rule shall be exempt from the otherwise applicable portions of Rule 1 (Organic Solvents).
- .0 The requirements of this rule shall not apply to the application of coatings to aircraft, aerospace vehicles, marine vessels, can, coils, and magnetic wire.
- .50 The provisions of this rule shall not apply to any operation subject to the requirements of Rule 2 (Motor Vehicle Assembly Coatings).
- .0 The provisions of this rule shall not apply to any operation subject to the requirements of Rule 12 (Motor Vehicle and Mobile Equipment Operations Phased I).
- .70 The provisions of this rule shall not apply to polyester resin operations and the application of polyester resin materials to metal parts and products that are subject to Rule 8 (Polyester Resin Operations).
- .80 For plastic parts and products coating operations (except for automotive/transportation and business machine plastic parts as specified in Section 5.1), the VOC limits of Section 5.5 Table 1 and the solvent cleaning requirements of Section 5.1 shall not apply to the types of coatings and coating operations specified in Sections 5.8.1 through 5.8.9, provided the operation

complies with the work practice standards in Section 5.9 and coating application methods in Section 5.12 of this rule.

- .8.1o Touch-up and repair coatings.
- .8.2 Stencil coatings applied to non-transparent substrates.
- .8.o Clear or translucent coatings.
- .8.o Coatings applied to a paint manufacturing facility while conducting performance tests on coatings.
- .8.5o Any individual coating category used in volumes less than 50 gallons in any one calendar year, if substitute compliance coatings are not available, and the total usage of all such coatings does not exceed 2 gallons per calendar year, per stationary source.
- .8.o Reflective coatings used on highway cones.
- .8.7o Mask coatings that are less than .5 millimeter thick (dried) and the area coated is less than 25 square inches.
- .8.8o Electro-Magnetic Interference (EMI)/Radio Frequency Interference (RFI) shielding coatings.
- .8.9o Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 10 gallons per calendar year, per stationary source.
- .9o For plastic parts and products coating operations (except for automotive/transportation and business machine plastic parts as specified in Section 5.1o), the coating application methods in Section 5.12 shall not apply to airbrush operations using five (5) gallons or less of coating per calendar year, provided the operator complies with the applicable VOC limits in Table 5, work practice standards in Section 5.9 and applicable recordkeeping requirements of Section 5.2.
- .1o For automotive/transportation and business machine plastic parts and products coating operations, the VOC limits of Section 5.1o Table 5 and the solvent cleaning requirements of Section 5.1o shall not apply to the types of coatings and coating operations specified in Sections 5.1o.1 through 5.1o.8, provided the operator complies with the work practice standards in Section 5.9 and coating application methods in Section 5.12 of this rule.

- .10.10 Textured Coatings.o
- .10.2 Textured Topcoats.o
- .10.0 Gloss Reducers.o
- .10.0 Vacuum Metalizing Coatings.o
- .10.50 Adhesion Primers.o
- .10.0 Electrostatic Preparation Coatings.o
- .10.70 Resist Coatings.o
- .10.80 Stencil Coatings.o
- .110 For pleasure craft surface coating operations, the application method in Section 5.12 shall not apply to extreme gloss coating provided the operator complies with the extreme gloss coating VOC limit in Table 5 and the work practice standards in Section 5.9 of this rule.o
- .12 The provisions of this rule shall not apply to stripping of cured coatings, cured adhesives, and cured inks, except the stripping of such material from spray application equipment.o
- .10 The VOC content limit of Table shall not apply to the following applications:o
  - .10.10 Cleaning of solar cells, laser hardware, scientific instruments, or high precision optics.o
  - .10.2 Cleaning in laboratory tests and analyses, or bench scale or research and development projects.o
  - .10.0 Cleaning of paper-based gaskets.o
  - .10.0 Cleaning of clutch assemblies where or rubber is bonded to metal by means of an adhesive.o
- .10 The VOC content limit of Table , Category C, shall not apply to the cleaning of application equipment used to apply coatings on satellites or the cleaning of application equipment used to apply radiation effect coatings.o

5.0 Requirements

5.1 General Coating Limits for Metal Parts and Products, Except for Large Appliance Parts and Products, and Metal Furniture Subject to Section 5.0.1

Except as otherwise provided by this rule, no person shall apply to any metal part or product any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (or pounds per gallon) of coating, less water and exempt compounds, as applied.

5.1.1 Baked Coating: 275 grams/liter (2.0 pounds/gallon)

5.1.2 Air-Dried Coating: 300 grams/liter (2.8 pounds/gallon)

5.1.0 VOC Content Limit for Dip Coating for steel joists (SIC 331), air-dried.

5.1.0.1 300 grams of VOC/liter (2.8 pounds of VOC/gallon) for coatings with a viscosity, as applied, of more than 5.0 centistokes at 78°F and an average dry-film thickness of greater than 2.0 mils;

5.1.0.2 100 grams of VOC/liter (0.9 pounds of VOC/gallon) for coatings with a viscosity, as applied, of less than or equal to 5.0 centistokes at 78°F and an average dry-film thickness of less than or equal to 2.0 mils.

5.2 Specialty Coating for Metal Parts and Products, Except for Large Appliance Parts and Products, and Metal Furniture Subject to Section 5.0.1

Any person subject to Section 5.2 shall not apply to any metal part or product any specialty coating with a VOC content in excess of the limits in Table 1.

Table 1. VOC Content Limits for Specialty Coatings, except for Large Appliance Parts and Products, and Metal Furniture subject to Section 5.1. Limits are expressed as grams of VOC/liter (or pounds of VOC/gallon) of coating, less water and less exempt compounds, as applied.		
Coating Type	VOC Limit	
	Baked	Air-Dried
Camouflage	0.0	2.0
Extreme Performance	2.0 Effective until December 1, 2010 0.0 Effective on and after January 1, 2011	2.0
Heat Resistant	0.0	2.0
Extreme High Gloss	0.0	2.0
High Performance Architectural	2.0	2.0
High Temperature	2.0	2.0
Metallic Coating	0.0	2.0
Pretreatment Coating	2.0	2.0
Touch Up and Repair Coating	0.0 Effective on and after January 1, 2011	2.0 Effective on and after January 1, 2011
Silicone Release	2.0	2.0
Solar Absorbent	0.0	2.0
Solid Film Lubricant	880 (7.0)	880 (7.0)

5.0 In lieu of complying with the applicable VOC content limits of Section 5.1, or Table 1, a person may control emissions from coating operations with an APCO-approved VOC emission control system that meets the requirements of Section 5.8.

5.0 Coating Limits for Large Appliance Parts and Products Coating Operation and Metal Furniture Coating Operation

5.0.1 A person whose total actual VOC emissions from all large appliance parts or products coating operations, or metal furniture coating operations, including related cleaning activities, at a stationary source are equal to or greater than three (3) tons of VOC per 12-month rolling period, before consideration of controls, shall not apply to any large appliance parts or products or metal furniture any coating with a VOC content in excess of the applicable limits in Table 2. In lieu of complying with the VOC content limits in Table 2, a person may comply with Section 5.1.2.

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5.o.1.2 Indieuo fcomplyingwitho theoVOCæcontentdimitsoinoTableo2,æano peratoro mayo perateo ao VOCæcontrolo systemo thato meetso theo applicablerequirementso foSectiono5.8.o

5.o.2 Anoo peratoro folargeappliancepartso rproductsocoatingo perations,o ro metalofurnitureocoatingo perationso whoseototaloactualoVOCæmissionso fromoallolargeappliancepartso rproductsocoatingo perations,o rometalofurnitureocoatingo perations,oincludingrelatedocleaningoactivities,oatoa stationarysourceoarelessothanothree(o)otonso foVOCpero 12-month rollingperiod,obeforeoconsiderationo focontrolso,shallocomplywitho theo applicabloVOCæcontentolimitso fcoatingsospecifiedoinoSectionso5.1oandoo 5.2.o Anoo peratoro shallo comply witho theo applicablo recordkeepingo requirementso foSectiono .2 to demonstratifotheoVOCæmissionsoffromallo largeappliancepartso rproductsocoatingo perations,o rometalofurnitureocoatingo perations,æincludingrelatedæcleaningæactivitiesæaredessdthanthree (o)otonso foVOCperd12-monthrollingperiod.o

Tableo2 -oVOCæContentLimitsfordLargeAppliancePartso rProducts,o andoMetalFurnitureCoatingoOperationso subjectto Sectiono5.o.1o Limitsareæexpressedæasgramso foVOC/liter(orpoundso foVOC/gallon)o fæcoating,o lessowaterænddæssæemptæcompounds,ææapplied.o		
CoatingoTypeo	VOCæLimito	
	Bakedo	Air-driedo
General,æOneoComponento	275æ(2.o)o	275æ(2.o)o
General,æMulti-Componento	275æ(2.o)o	(2.8)o
ExtremedHighGlosso	(o.o)o	(2.8)o
ExtremedPerformanceo	(o.o)o	2 (o.5)o
HeatResistanto	(o.o)o	2 (o.5)o
Metallico	2 (o.5)o	2 (o.5)o
PretreatmentCoatingo	2 (o.5)o	2 (o.5)o
SolaroAbsorbento	(o.o)o	2 (o.5)o

5.5o Plastico Partso ando Productso Coatingo Operationso (Excepto foro Automotive/TransportationoandooBusinessoMachinooPlasticoPartsoandooProductso CoatingoOperationso thatoæareæsubjectto Sectiono5.o)o



On and after January 1, 2011, any person for plastic parts and products coating operations, except for automotive/transportation and business machine plastic parts and products coating operations that are subject to Section 5.0, shall comply with the applicable requirements of Section 5.5.1 or Section 5.5.2.

5.5.1 Any person whose total actual VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, at a stationary source are equal to or greater than 2.7 tons of VOC per 12-month rolling period, before consideration of controls, shall not apply to any plastic parts and products or any coating with a VOC content in excess of the applicable limits in Table 1.

5.5.1.1 Any person shall comply with the applicable recordkeeping requirements of Section 5.2 and calculate the VOC emission of metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, to demonstrate if the VOC emissions from all, including related cleaning activities, are equal to or greater than 2.7 tons of VOC per 12-month rolling period.

5.5.1.2 In lieu of complying with the VOC content limits in Table 1, any person may operate a VOC control system that meets the applicable requirements of Section 5.8.

5.5.2 Any person for plastic parts and products coating operations whose total actual VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, at a stationary source are less than 2.7 tons of VOC per 12-month rolling period, before consideration of controls, are not subject to the coating limits in Table 1. However, the person shall comply with the applicable recordkeeping requirements of Section 5.2 and calculate the VOC emission to demonstrate if the VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities are less than 2.7 tons of VOC per 12-month rolling period.

Table 5.1 - VOC Content Limits for Plastic Parts and Products Coating Operations Subject to Section 5.1, except for Automotive/Transportation and Business Machine Plastic Parts and Products that are subject to Section 5.0	
Limits are expressed as grams of VOC/liter (or pounds of VOC/gallon) of coating, less water and less exempt compounds, as applied.	
Coating Type	VOC Limit
General One-Component	280 (2.0)
General Multi-Component	2 (0.5)
Electric Dissipating Coatings and Shock-Free Coatings	80 (0.7)
Extreme Performance	2 (0.5) for 2-pack coating
Metallic	2 (0.5)
Military Specification	(2.8) for 1-pack 2 (0.5) for 2-pack coating
Mold-Seal	70 (0.0)
Multi-colored Coatings	80 (5.7)
Optical Coatings	80 (0.7)
Vacuum-Metalizing	80 (0.7)

5.0 Automotive/Transportation and Business Machine Plastic Parts and Products Coating Operations

On and after January 1, 2011, any operator of automotive/transportation and business machine plastic parts and products coating operations shall comply with the applicable requirements of Section 5.0.1 or Section 5.0.2.

5.0.1.0 Any operator whose total actual VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, at a stationary source are equal to or greater than 2.7 tons of VOC per 12-month rolling period, or before consideration of controls, shall not apply to any automotive/transportation and business machine plastic parts and products or any coating with a VOC content in excess of the applicable limits in Table 5.1.

5.0.1.1.0 Any operator shall comply with the applicable recordkeeping requirements of Section 5.0.2 calculate the VOC emissions to demonstrate if the VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, are equal to or greater than 2.7 tons of VOC per 12-month rolling period.

5.o.1.2 Industries complying with the VOC content limits in Table 5.1, and operators may operate a VOC control system that meets the applicable requirements of Section 5.8.

5.o.2 Any operator of automotive/transportation and business machine plastic parts and products coating operations whose total actual VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, at a stationary source are less than 2.7 tons of VOC per 12-month rolling period, before consideration of controls, are not subject to the coating limits in Table 5.1. However, the operator shall comply with the applicable recordkeeping requirements of Section 5.2 and calculate the VOC emissions to demonstrate if the VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities are less than 2.7 tons of VOC per 12-month rolling period.

Table 5.7 - VOC Content Limits for Automotive/Transportation and Business Machine Plastic Parts and Products Coating Operations Subject to Section 5.7.1 Limits are expressed as grams of VOC/liter (or pounds of VOC/gallon) of coating, less water and exempt compounds, as applied.	
VOC Content Limit for Automotive/Transportation Plastic Parts and Products Coatings	
Coating Type	VOC Limit
<b>I. High Bake Coatings - Interior and Exterior</b>	
Flexible Primer	50 (0.5)
Non-flexible Primer	2 (0.5)
Basecoat	52 (0.0)
Clearcoat	80 (0.0)
Non-basecoat/clearcoat	52 (0.0)
<b>II. Low Bake/Air-Dried Coatings - Exterior Parts</b>	
Primer	580 (0.8)
Basecoat	(5.0)
Clearcoat	50 (0.5)
Non-basecoat/clearcoat	(5.0)
<b>III. Low Bake/Air-Dried Coatings - Interior parts</b>	
	(5.0)
<b>IV. Touch-up and Repair Coatings</b>	
	2 (5.2)
VOC Content Limit for Business Machine Plastic Parts and Products Coatings	
Coating Type	VOC Limit
Primer	50 (2.9)
Topcoat	50 (2.9)
Texture Coat	50 (2.9)
Fog Coat	2 (2.2)
Touch-up and Repair	50 (2.9)

5.7. Pleasure Craft Coating Operations

On and after January 1, 2011, any operator of pleasure craft coating operations shall comply with the applicable requirements of Section 5.7.1 or Section 5.7.2.

5.7.1. Any operator whose total actual VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, at a stationary source are equal to or greater than 2.7 tons of VOC per 12-month rolling period, before consideration of controls, shall not apply any coating to pleasure crafts with a VOC content in excess of the applicable limits in Table 5.7.

5.7.1.1. Any operator shall comply with the applicable recordkeeping requirements of Section 5.2 to demonstrate the VOC emissions from all metal parts and products, plastic parts and products,

automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, are equal to or greater than 2.7 on so fo VOC per 12-month rolling period.

5.7.1.2 In lieu of complying with the VOC content limits in Table 5, a operator may operate a VOC control system that meets the applicable requirements of Section 5.8.

5.7.2 A operator for pleasure craft coating operations whose total actual VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities, at a stationary source are less than 2.7 on so fo VOC per 12-month rolling period, before consideration of controls, are not subject to the coating limits in Table 5. However, the operator shall comply with the applicable record keeping requirements of Section 5.2 calculate the VOC emission to demonstrate if the VOC emissions from all metal parts and products, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft coating operations, including related cleaning activities are less than 2.7 on so fo VOC per 12-month rolling period.

Table 5. VOC Content Limits for Pleasure Craft Coating Operations Subject to Section 5.7.1. Limits are expressed as grams of VOC/liter (or pounds of VOC/gallon) of coating, less water and less exempt compounds, as applied.	
Coating Type	VOC Limit
Extreme High Gloss Topcoat	90 (0.1)
High Gloss Topcoat	2 (0.5)
Pretreatment Wash Primer	780 (0.5)
Finish Primer Surfacer	2 (0.5)
High Build Primer Surfacer	(2.8)
Aluminum Substrate Antifoulant Coating	50 (0.7)
Other Substrate Antifoulant Coating	(2.8)
All other pleasure craft surface coatings for metal or plastic	2 (0.5)

5.8 VOC Emission Control System Requirements

In lieu of complying with applicable provisions of Sections 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.10, or 5.12, a operator may use a VOC emission control system that controls emissions from the source operation and meets the requirements of Sections 5.8.1 through 5.8.6.

- 5.8.1o The VOC emission control system shall be under District permit.
- 5.8.2 The VOC emission control system shall comply with the requirements of Sections 5.8.1 and 5.8.2 during periods of emission-producing activities.
- 5.8.3 The VOC emission control system shall be operated with an overall capture and control efficiency of at least 90 percent by weight as determined in Section 5.8.3.
- 5.8.4 Use of a VOC emission control system shall not result in emissions in excess of those that would have been emitted had the operator complied with the applicable provisions of Sections 5.1, 5.2, 5.3, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, and 5.12.
- 5.8.4.1 The following equation shall be used to determine if the minimum required overall capture and control efficiency of an emission control system is at least equivalent to or greater than the VOC reduction that would be achieved using compliant materials, equipment, or work practices, as stated in Section 5.8.4.

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

Where:

- CE = Minimum Required Control Efficiency, percent
- $VOC_{LWC}$  = VOC Limit for Rule 1303, less water and less exempt compounds
- $VOC_{LWn,Max}$  = Maximum VOC content of coating (or solvent) used in conjunction with a control device, less water and less exempt compounds
- $D_{n,Max}$  = Density of solvent, reducer, or thinner contained in the noncompliant coating (or cleaning solvent), containing the maximum VOC content of the multi-component (or cleaning solvent)
- $D_c$  = Density of corresponding solvent, reducer, or thinner used in the compliant coating (or cleaning solvent) system = 880 gm/liter

5.9o Work Practice Standardso

5.9.1o An operator for large appliance parts and products, and metal furniture coating operations shall minimize VOC emissions by complying with the work practice standards specified in Sections 5.9.o through 5.9.o.o

5.9.2 Effective no and after January 1, 2011, an operator for metal parts and products coating operations, plastic parts and products coating operations, automotive/transportation and business machine plastic parts and products coating operations, and pleasure craft coating operations shall minimize VOC emissions by complying with work practice standards specified in Sections 5.9.o through 5.9.o.o

5.9.o Store all VOC-containing coatings, thinners, cleaning materials, and waste material in closed non-absorbent and non-leaking containers. The containers shall remain closed at all times, except when specifically in use.

5.9.o Close mixing vessels that contain VOC coatings and the materials, except when specifically in use.

5.9.5o Minimize spills of any VOC-containing materials and clean up spills immediately.

5.9.o Convey VOC-containing materials in closed containers or pipes.

5.1o Organic Solvent Cleaning Requirementso

5.1o.1o An operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified in Table 5.1o.

5.1o.2 An operator shall perform all solvent cleaning operations with cleaning material having a VOC content of 250g/L or less, unless such cleaning operations are performed within the control of an APCO-approved VOC emission control system that meets the requirements of Section 5.8.o

Table - VOC Content Limits for Organic Solvents Used in Cleaning Operations Limits are expressed as grams of VOC/liter (or pounds of VOC/gallon) of material	
Type of Solvent Cleaning Operation	VOC Content Limit
A. Product Cleaning During Manufacturing Process or Surface Preparation for Coating Application	25 (0.21)
B. Repair and Maintenance Cleaning	25 (0.21)
C. Cleaning of Coating Application Equipment	25 (0.21)

### 5.11 Solvent Storage and Disposal Requirements

An operator shall store or dispose of fresh spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers when the container is empty.

5.12 Application Equipment Requirements: An operator shall not use or operate any coating application equipment on any metal parts and products, large appliances or parts and products, metal furniture, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure crafts subject to the provision of this rule unless one of the following methods is used:

5.12.1 Electrostatic application;

5.12.2 Electrodeposition;

5.12.3 High-Volume, Low-Pressure (HVLP) spray;

5.12.3.1 High-Volume, Low-Pressure (HVLP) spray equipment shall be operated in accordance with the manufacturer's recommendations.

5.12.3.2 For HVLP spray guns manufactured prior to January 1, 1990, the end user shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure



tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns.

5.12.o.o A person shall not sell or offer for sale or for use within the District any HVLPS spray gun without a permanent marking denoting the maximum inlet air pressure in psig at which the gun will operate within the parameters specified in Section 5.12.o.

5.12.o Flow coating;

5.12.5o Roll coating;

5.12.o Dip coating;

5.12.7o Brush coating; or

5.12.8o Continuous coating;

5.12.9o Any other coating application method which is demonstrated to the APCO to be capable of achieving at least 50 percent transfer efficiency. The transfer efficiency shall be determined in accordance with the SCAQMD method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," of May 2, 1989, also contained in Section 5.8.o. Prior written approval from the APCO shall be obtained for each coating application method to be used pursuant to Section 5.12.9.o

5.12.1o In lieu of compliance with Sections 5.12.1 through 5.12.9, a person may control emissions from application of equipment with a VOC emission control system that meets the requirements of Section 5.8.o

## 5.12 Prohibition of Specification

No person shall solicit or require for use or specify the application of a coating subject to this rule if such use or application results in a violation of any of the provisions of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any metal part or product at any physical location within the District.

.0 Administrative Requirements

.10 Labeling Requirements

.1.10 Coating VOC Content

Each container or accompanying data sheet for any coating subject to this rule shall display the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). VOC content displayed may be calculated using product formulation data, or may be determined using the test method in Section 5. For determination of compliance and enforcement of the limits specified in Section 5 of this rule, the VOC content of any coating determined to exceed its applicable limit through the use of either product formulation data or the test method in Section 5.1 shall constitute a violation of this rule.

.1.2 Thinning Recommendations

Each container or accompanying data sheet for any coating subject to this rule shall display a statement of the manufacturer's recommendation regarding thinning of the coating. This requirement shall not apply to the thinning of coatings with water.

.1.0 Solvent Compliance Statement Requirements

Manufacturers of any solvents subject to this rule shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content, and density of the solvent, as supplied. The VOC content shall be expressed in units of g/liter or lb/gallon.

.2 Recordkeeping

Any person subject to Section 5, exempt by Sections 1, 8.5, 8.9 and 9 shall comply with the following requirements:

.2.10 Maintain a current list of coatings and solvents in use which contain or are used for the coating data necessary to evaluate compliance, including the following information, as applicable:

.2.1.10 mix ratio of components used,

- .2.1.2 VOC content and specific chemical constituents of coatings as applied, and
- .2.1.3 VOC content and specific chemical constituents of solvents used for surface preparation and cleanup.
- .2.2 Maintain daily records which include the following information:
  - .2.2.1 volume of coating/solvent mix ratio,
  - .2.2.2 VOC content (lb/gal or grams/liter) and, for dip coating operations, viscosity (cSt) of coating,
  - .2.2.3 volume of each coating used (gallons), and
  - .2.2.4 quantity of cleanup solvent used (gallons).

.2.3 VOC Emission Control System Records

Any person using a VOC emission control system pursuant to Section 5.8 as a means of complying with this rule shall maintain records of key system operating parameters which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with VOC limits. The parameters include, but are not limited to, temperatures, pressures, and flow rates.

- .2.3.1 Consistent records may be kept in grams/liter and liters instead of pounds/gallon and gallons. Any person for a stationary source subject to this rule shall maintain such records on a daily basis. Any person that is subject to the exemption of Section 5.1 shall maintain such records for non-compliant coatings on the days that such non-compliant coatings are used.

- .2.3.2 The person shall retain the records specified in Section 5.2.1 through 5.2.3, as applicable, on site for a period of five years, make the records available on site during normal business hours to the APCO, ARB, or EPA and submit the records to the APCO, ARB, or rEPA upon request.

.o Test Methods

The following test methods shall be used to determine compliance with the provisions of this rule. Alternate test methods may be used provided they are approved by the APCO, ARB, and EPA.

- .o.1o VOC content of coatings and solvents shall be analyzed by EPA Method 2 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 22.
- .o.2 Emissions of VOC shall be measured by EPA Method 25, 25A, or 25B, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 22.
- .o.o The viscosity of coatings used for dip coating of steel joists as specified in Section 5.1 of this rule, shall be determined by using ASTM D5078-98 or ASTM D5125-97.
- .o.o The quantification of coating as a metallic/iridescent top coat shall be determined by SCAQMD Method 18 (Determination of Weight Percent of Elemental Metal in Coatings by X-ray Diffraction Method), July 1990.
- .o.5o Acid Content: Measurement of acid content of pre-treatment wash primers shall be conducted and reported in accordance with ASTM D1010-90, Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products.
- .o.o Determination of emissions of VOC from spray gun cleaning systems shall be made using SCAQMD "General Method for Determining Solvent Losses from Spray Gun Cleaning Systems," dated October 1989.
- .o.7o Determination of Overall Capture and Control Efficiency of VOC Emission Control Systems shall be made using the following methods:
  - .o.7.1o The capture efficiency of a VOC emission control system's collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and CFR 51, Appendix M, Method 2 -2 F, as applicable.

.o.7.1.1o Capture Efficiency, o in percent, o is the ratio fo the weight fo VOC in the effluent stream entering the control device to the weight fo VOC emitted from the coating operation so that are subject to this rule, o both measured simultaneously, o shall be calculated by the following equation: o

$$\text{Capture Efficiency (\%)} = \frac{W_c - W_e}{W_c} \times 100$$

Where: o

$W_c$  = weight fo VOC entering the control device o

$W_e$  = weight fo VOC emitted o

.o.7.2 The control efficiency fo a VOC emission control system's VOC control device shall be determined using EPA Methods 2, o 2A, o ro 2D for measuring flow rates and EPA Methods 25, o 25A, o ro 25B for measuring total gaseous organic concentration at the inlet and outlet fo the control device. o EPA Method 18o ro ARB Method 22 shall be used to determine the emission fo exempt compounds. o

.o.7.2.1o Control Efficiency, o in percent, o is the ratio fo the weight fo VOC removed by the control device from the effluent stream entering the control device to the weight fo VOC in the effluent stream entering the control device, o both measured simultaneously, o shall be calculated by the following equation: o

$$\text{Control Device Efficiency (\%)} = \frac{W_c - W_a}{W_c} \times 100$$

Where: o

$W_c$  = weight fo VOC entering the control device o

$W_a$  = weight fo VOC discharged from the control device o

.o.7.o For VOC emission control systems that consist of a single VOC emission collection device connected to a single VOC emission control device, the overall capture and control efficiency shall be calculated by using the following equation:

$$CE_{\text{Capture and Control}} = \frac{CE_{\text{Capture}} \times CE_{\text{Control}}}{100}$$

Where:

$CE_{\text{Capture and Control}}$  = Overall Capture and Control Efficiency, in percent

$CE_{\text{Capture}}$  = Capture Efficiency of the collection device, in percent, as determined in Section .o.7.1.o

$CE_{\text{Control}}$  = Control Efficiency of the control device, in percent, as determined in Section .o.7.2.o

.o.8.o The transfer efficiency of alternative coating application methods pursuant to Section 5.12.9 shall be determined in accordance with the SCAQMD Method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," May 2, 1989.

.o Multiple Test Methods

When more than one test method or set of test methods is specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.