

**\* WORKING GROUP PRELIMINARY DRAFT \***

**\* FOR DISCUSSION PURPOSES ONLY \***

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(Amended January 7, 2005)(Proposed Amended Rule 1168 March 2014)

3/14/14

**PROPOSED AMENDED RULE 1168. ADHESIVE AND SEALANT APPLICATIONS**

(a) Purpose and Applicability

The purpose of this rule is to reduce emissions of volatile organic compounds (VOCs), toxic air contaminants, and stratospheric ozone-depleting compounds from the application of adhesives, adhesive primers, sealants, and sealant primers. This rule applies to any person who sells, stores, supplies, offers for sale or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers, unless otherwise specifically exempted by this rule. This rule also applies to all uses of adhesives, adhesive primers, caulks, sealants or sealant primers excluding consumer uses where the product is sold in containers less than or equal to one pound, by product weight, or 16 fluid ounces, by product volume, and where there is an applicable VOC limit in the California Air Resources Board Consumer Products Regulation (Title 17 of the California Code of Regulations, Section 94507, et. seq.).

(b) Definitions

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

- (1) ACRYLONITRILE-BUTADIENE-STYRENE (ABS) plastic is made by reacting monomers of acrylonitrile, butadiene, and styrene and is normally identified with an ABS marking.
- (2) ADHESIVE is any substance that is used to bond one surface to another surface by attachment. Adhesive does not include adhesive tape.
- (3) ADHESIVE PRIMER is a film-forming material applied to a substrate, prior to the application of an adhesive, to increase adhesion or film bond strength, promote wetting, or form a chemical bond with a subsequently applied adhesive.
- (4) ADHESIVE TAPE is a backing material coated with an adhesive and includes drywall tape, heat sensitive tape, pressure sensitive adhesive and water activated tape.

- (5) AEROSOL ADHESIVE is any adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application where no ancillary hoses or spray equipment is used.
- (6) ARCHITECTURAL APPLICATION is the use of a regulated product on stationary structures, including mobile homes, and their appurtenances.
- (7) ARCHITECTURAL APPURTENANCE is any accessory to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools, signs, motion picture and television production sets, and concrete forms.
- (8) CARPET PAD ADHESIVE is an adhesive used for the installation of a carpet pad (or cushion) beneath a carpet.
- (9) CERAMIC TILE ADHESIVE is an adhesive used for the installation of ceramic tile products.
- (10) CHLORINATED POLYVINYL CHLORIDE (CPVC) plastic is a polymer of the chlorinated polyvinyl monomer that contains 67% chlorine and is normally identified with a CPVC marking.
- (11) CLEAR, PAINTABLE AND IMMEDIATELY WATER-RESISTANT SEALANT is a compound with adhesive properties that contains no appreciable level of opaque fillers or pigments; transmits most or all visible light through itself when cured; is capable of being painted; and is immediately resistant to precipitation upon application.
- (12) COMPUTER DISKETTE MANUFACTURING is the process where the fold-over flaps are glued to the body of a vinyl jacket.
- (13) CONTACT ADHESIVE is an adhesive applied to two separate surfaces, allowed to dry before the two surfaces are placed in contact with each other, and forms an immediate bond after both adhesive-coated surfaces are placed in full contact with each other.
- (14) COVE BASE is a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor to to form an inside corner.

- (15) CYANOACRYLATE ADHESIVE is an acrylic adhesive that contains at least 85 percent by weight ethyl, methyl, methoxymethyl or other functional groupings of cyanoacrylate.
- (16) DIP COAT is a method of application to a substrate by submersion into and removal from a bath.
- (17) DRY WALL ADHESIVE is an adhesive used during the installation of gypsum dry wall to studs or solid surfaces.
- (18) ELECTROSTATIC APPLICATION is spray method where the atomized droplets are charged and subsequently deposited on the substrate by electrostatic attraction.
- (19) ENERGY CURABLE ADHESIVES and SEALANTS are single-component reactive products that cure upon exposure to visible-light, ultra-violet light or to an electron beam. The VOC content of thin film Energy Curable Adhesives and Sealants may be determined by manufacturers using ASTM Test Method 7767-11 Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them.
- (20) EXEMPT COMPOUNDS are as defined in Rule 102 and the provisions of (b)(75) VOLATILE ORGANIC COMPOUND (VOC).
- (21) FACILITY means any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control). Such above-described groupings, if not contiguous, but connected only by land carrying a pipeline, shall not be considered one facility.
- (22) FIBERGLASS is fine filaments of glass.
- (23) FLOW COAT is an application method that coats an object by flowing a stream of regulated product over the object and draining off any excess product.
- (24) FOAM SEALANT is a foam used to fill and form a durable, airtight, water-resistant seal to common building substrates such as wood, brick, concrete, foam board and plastics. Foam sealant includes insulating foam.

- (25) GRAMS OF VOC PER LITER OF REGULATED PRODUCT, LESS WATER AND LESS EXEMPT COMPOUNDS is the weight of VOC per combined volume of VOC and product solids, and can be calculated by the following equation:

Grams of VOC per Liter of Regulated Product, Less Water and Less

$$\text{Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

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

For regulated products that contain reactive diluents, the VOC content of the product is determined after curing. The grams of VOC per liter of any regulated product, except a low solids product shall be calculated by the following equation:

Grams of VOC per Liter of Regulated Product, Less Water and Less

$$\text{Exempt Compounds} = \frac{W_{rs} - W_{rw} - W_{res}}{V_{rm} - V_{rw} - V_{res}}$$

- Where:  $W_{rs}$  = weight of volatile compounds not consumed during curing, in grams  
 $W_{rw}$  = weight of water not consumed during curing, in grams  
 $W_{res}$  = weight of exempt compounds not consumed during curing, in grams  
 $V_m$  = volume of material prior to reaction, in liters  
 $V_{rw}$  = volume of water not consumed during curing, in liters  
 $V_{res}$  = volume of exempt compounds not consumed during curing, in liters

- (27) GRAMS OF VOC PER LITER OF MATERIAL is the weight of VOC per volume of material, to be used for a low-solids regulated product, and can be calculated by the following equation:

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

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

- (28) HAND APPLICATION METHODS is the application of a regulated product using hand held equipment. Such equipment includes paint brush, hand roller, trowel, spatula, dauber, rag, sponges, and mechanically-and/or pneumatic-driven syringes provided there is no atomization of the materials.
- (29) HIGH-VOLUME, LOW-PRESSURE (HVLP) SPRAY is equipment used to apply a regulated product by means of a spray gun that is designed to be operated and that is operated between 0.1 and 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.
- (30) INDOOR FLOORING ADHESIVE is an adhesive used during the installation of indoor flooring that is in an enclosure and is not exposed to ambient weather conditions during normal use.
- (31) INSULATING FOAM is polymer-containing material injected into wall cavities to provide thermal resistance and sound reduction.
- (32) LOW-SOLIDS is any regulated product that contains 120 grams or less of solids per liter of material).
- (33) MAINTENANCE is a routine process to keep equipment and machinery in working order or to prevent break downs.
- (34) MANUFACTURING is the use of tools and labor to make things for sale.
- (35) MARINE APPURTENANCE is a wood boardwalk, deck, dock, fender, lock gate or other wooden structure specified for the marine environment.

- (36) MARINE DECK SEALANT is any sealant that is applied to wooden marine decks and their appurtenances and is specified and used exclusively for the marine environment.
- (37) MARINE DECK SEALANT PRIMER is any sealant primer that is applied to wooden marine decks and their appurtenances and is specified and used exclusively for the marine environment.
- (38) MULTI-PURPOSE CONSTRUCTION ADHESIVE is any adhesive to be used for the installation or repair of various construction materials, including but not limited to: drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.
- (39) OUTDOOR FLOOR COVERING ADHESIVE is an adhesive used during the installation of floor covering that is not in an enclosure or is exposed to ambient weather conditions during normal use.
- (40) PANEL ADHESIVE is an adhesive used for the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces.
- (41) PERCENT VOC BY WEIGHT is the ratio of the weight of the VOC to the weight of the material, expressed as a percentage of VOC by weight. The percent VOC by weight can be calculated as follows:

$$\% \text{ VOC weight} = \frac{W_v}{W} \times 100$$

Where:  $W_v$  = weight of the VOCs, in grams  
 $W$  = weight of material, in grams

- (42) PERSON is as defined in Rule 102.
- (43) PLASTIC CEMENT WELDING is the use of adhesives made of resins and solvents which are used to dissolve the surfaces of plastic, except ABS, CPVC, and PVC plastic, to form a bond between mating surfaces.
- (44) PLASTIC FOAM is a foam constructed of plastics.
- (45) PLASTICS are synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcers. They are capable of being molded, extruded, cast into various shapes and films or

drawn into filaments and are used to produce pipe, solid sheet, film, or bulk products.

- (46) POLYVINYL CHLORIDE (PVC) plastic is a polymer of the chlorinated vinyl monomer that contains 57 percent chlorine.
- (47) POROUS MATERIAL is a substance which has tiny openings, often microscopic, in which fluids may be absorbed or discharged. Such materials include, but are not limited to, wood, fabric, paper, corrugated paperboard, and plastic foam.
- (48) PRESSURE SENSITIVE ADHESIVE is an adhesive, typically coated on backings or release liners, that forms a bond when pressure is applied, without the need for solvent, water or heat.
- (49) REACTIVE DILUENT is a liquid which is a VOC during application and one in which, through chemical and/or physical reactions, such as polymerization, 20 percent or more of the VOC becomes an integral part of the product.
- (50) REGULATED PRODUCT is an adhesive, adhesive primer, caulk, sealant or sealant primer subject to this rule.
- (51) REPAIR is operation or activity to return a damaged object, or an object not operating properly, to good condition.
- (52) ROADWAY SEALANT is any sealant to be applied to streets, highways, and other surfaces, including but not limited to curbs, berms, driveways, and parking lots.
- (53) ROLL COATER is a series of mechanical rollers that form a thin film on the surface roller, which is applied to a substrate by moving the substrate underneath the roller.
- (54) RUBBER is any natural or manmade rubber-like substrate, including but not limited to, styrene-butadiene, polychloroprene (neoprene), butyl, nitrile, chlorosulfonated polyethylene and ethylene propylene diene terpolymer.
- (55) RUBBER FLOORING ADHESIVE is an adhesive that is used for the installation of flooring material in which both the back and the top surface are made of synthetic rubber, and which may be in sheet or tile form.
- (56) RUBBER VULCANIZATION ADHESIVE is a reactive adhesive used for rubber-to-substrate bonding achieved during vulcanization of the rubber

- elastomer at temperatures greater than 250°F. Vulcanized rubber adhesive does not include bonding previously vulcanized rubber.
- (57) SEALANT is any material with adhesive properties that is formulated primarily to fill, seal, or waterproof gaps or joints between two surfaces. Sealants include caulks. Sealant does not include any sealer that is applied as a continuous coating.
- (58) SEALANT PRIMER is any film-forming product applied to a substrate, prior to the application of a sealant, to enhance the bonding surface.
- (59) SHOE REPAIR, LUGGAGE AND HANDBAG ADHESIVE is an adhesive used to repair worn, torn or otherwise damaged uppers, soles, and heels of shoes, or for making repairs to luggage and handbags.
- (60) SINGLE-PLY ROOF MEMBRANE ADHESIVE is any adhesive sealant to be used for the installation or repair of single-ply roof membrane. Installation includes, but is not limited to attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane.
- (61) SINGLE-PLY ROOF MEMBRANE SEALANT is any sealant used for the installation or repair of single-ply roof membrane.
- (62) SOLVENT WELDING is the softening of the surfaces of two substrates by wetting them with solvents and/or adhesives, and joining them together through a chemical and/or physical reaction(s) to form a fused union.
- (63) SPECIAL PURPOSE CONTACT ADHESIVE is a contact adhesive that is used to bond all of the following substrates to any surface: melamine covered board, metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber and wood veneer 1/16 inch or less in thickness.
- (64) STRUCTURAL GLAZING ADHESIVE is any adhesive to be used to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.
- (65) STRUCTURAL WOOD MEMBER ADHESIVE is an adhesive used for the construction of any load bearing joints in wooden joists, trusses, or beams.
- (66) SUBFLOOR ADHESIVE is an adhesive used for the installation of subflooring material over floor joists.

- (67) THIN METAL LAMINATING is a process of bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mil.
- (68) TIRE REPAIR is the expanding of a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.
- (69) TIRE TREAD ADHESIVE is any adhesive to be applied to the back of precured tread rubber and to the casing and cushion rubber, or to be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.
- (70) TOP AND TRIM ADHESIVE is an adhesive used during the installation of automotive and marine trim, including, but not limited to, headliners, vinyl tops, vinyl trim, sunroofs, dash covering, door covering, floor covering, panel covering and upholstery.
- (71) TRAFFIC MARKING TAPE is preformed reflective tape that is applied to public streets, highways, and other surfaces, including but not limited to curbs, berms, driveways, and parking lots.
- (72) TRAFFIC MARKING TAPE ADHESIVE PRIMER is any adhesive primer that is applied to surfaces prior to installation of traffic marking tape.
- (73) TRANSFER EFFICIENCY is the ratio of the weight or volume of the regulated product solids adhering to an object to the total weight or volume, respectively, of the regulated product solids dispensed in the application process, expressed as a percentage.
- (74) VCT means Vinyl Composition Tile and is a material made from thermoplastic resins, fillers and pigments.
- (75) VEHICLE GLASS ADHESIVE PRIMER is a primer applied to vehicle glass or to the frame of a vehicle prior to installation or repair of the vehicle glass using an adhesive or sealant to improve adhesion to the pinch weld. For the purposes of this definition, a vehicle is a mobile machine that transports passengers or cargo, and includes automobiles, trucks, buses, motorcycles, trains, ships and boats.
- (76) VOLATILE ORGANIC COMPOUND (VOC) is as defined in Rule 102 - Definition of Terms. For the purpose of this rule, tertiary butyl acetate

(TBAC) and dimethyl carbonate (DMC) shall be considered exempt as a VOC only for purposes of VOC emission limitations and VOC content requirements when used in roofing regulated products. TBAC shall be subject to all recordkeeping, emission reporting, photochemical dispersion modeling, and inventory requirements which apply to VOCs.

- (77) WATERPROOF RESORCINOL GLUE is a two-part, resorcinol-resin-based adhesive used in applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.
- (78) WOOD FLOORING ADHESIVE is an adhesive used to install a wood floor surface, which may be in the form of parquet tiles, wood planks, or strip-wood.

(c) Requirements

- (1) A person shall not apply adhesives, adhesive primers, caulks, sealants, or sealant primers subject to the provisions of this rule, which contain VOC in excess of the limits specified in Table 1 below:

**Table 1 – Regulated Product Categories and VOC Limits**

Category	VOC Limits (g/L)*				
	Current	1/1/2015	1/1/2016	1/1/2018	1/1/2019
<b>Adhesives</b>					
ABS Welding	325				
Architectural Applications					
Carpet Pad Adhesive	50		20		
Ceramic Tile Adhesive	65		20		
Cove Base Adhesive	50		20		
Dry Wall and Panel Adhesive	50		20		
Indoor Flooring Adhesive	50		20		
Multi-Purpose Construction Adhesive	70		20		
Other Roof Adhesive	250			100	
Outdoor Floor Covering Adhesive	150		20		
Rubber Floor Adhesive	60		20		
Single Ply Roof Membrane Adhesive	250			100	

Category	VOC Limits (g/L)*				
	Current	1/1/2015	1/1/2016	1/1/2018	1/1/2019
Structural Glazing Adhesive	100		40		
Structural Wood Member Adhesive	140		50		
Subfloor Adhesive	50		20		
VCT and Asphalt Tile Adhesive	50		20		
Wood Flooring Adhesive	100		20		
Computer Diskette Manufacturing	350				
Contact Adhesive	80				
CPVC Welding	490				
Plastic Cement Welding	250				
PVC Welding	510				
Rubber Vulcanization Adhesive	850				250
Special Purpose Contact Adhesive	250				
Thin Metal Laminating	780				
Tire Retread	100				
Top and Trim Adhesive	250		540		
Waterproof Resorcinol Glue			170		
All Other Adhesives	250				
<b>Substrate Specific Adhesive Applications</b>					
Metal	30				
Plastic Foams	50		20		
Porous Material (except wood)	50				
Wood	30				
Fiberglass	80				
Reinforced Plastic Composite			200		
Other Substrates	250				
<b>Sealants and Caulks</b>					
Architectural					
Clear, Paintable, Immediately Water-Resistant		380		50	
Foam Sealant		200		20	
Marine Deck	760				

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Category	VOC Limits (g/L)*				
	Current	1/1/2015	1/1/2016	1/1/2018	1/1/2019
All Other Roof	300			100	
Single-Ply Roof Membrane	450			100	
All Other Architectural	250		50		
Roadway	250		50		
All Other Sealants	420				
<b>Adhesive Primers</b>					
Plastic	550				
Pressure Sensitive		785			
Traffic Marking Tape	150				
Vehicle Glass	700				
All Other Adhesive Primers	250				
<b>Sealant Primers</b>					
Architectural					
Marine Deck	760				
Non Porous	250				
Porous	775		250		
All Other Sealant Primers	750				

\* VOC limits are expressed as grams of VOC per liter of regulated products less water and less exempt compounds as determined in paragraph (b)(25) except for low-solid regulated products where the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(26).

- (2) A person shall accumulate regulated products and VOC-laden cloth or paper used in regulated product applications intended for disposal in closed containers except when depositing or removing the contents of the container.
- (3) Solvent cleaning of application equipment, parts, products, tools, machinery, equipment, general work areas, and the storage and disposal of VOC-containing materials used in cleaning operations shall be carried out pursuant to Rule 1171 - Solvent Cleaning Operations.
- (4) Transfer Efficiency  
A person shall not apply VOC-containing regulated product unless the regulated product is applied with properly operating equipment in accordance with operating procedures specified by either the equipment manufacturer or the Executive Officer. Application of regulated product shall be accomplished only by the use of one of the following methods:

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- (A) Electrostatic application; or
  - (B) Flow coat; or
  - (C) Dip coat; or
  - (D) Roll coat; or
  - (E) High-Volume, Low-Pressure (HVLP) spray; or
  - (F) Hand application methods; or
  - (G) Such other application methods as are demonstrated to the Executive Officer to be capable of achieving a transfer efficiency equivalent to or better than the method listed in subparagraph (c)(4)(E) and for which prior written approval of the Executive Officer has been obtained.
- (5) A person may comply with the provisions of paragraphs (c)(1), or (c)(4), or both, by using approved air pollution control equipment, provided:
- (A) The control device reduces VOC emissions from an emission collection system by at least 95 percent by weight or the output of the air pollution control device is no more than 5 PPM VOC by volume calculated as carbon with no dilution; and
  - (B) The owner/operator demonstrates that the emission collection system collects at least 90 percent by weight of the VOC emissions generated by the sources of VOC emissions.
- (6) A person may comply with the provisions of paragraph (c)(1) by means of an Alternative Emission Control Plan pursuant to Rule 108.
- (7) Regulated Product Categorization
- If anywhere on the regulated product container, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the regulated product may be used as, or is suitable for use as, a regulated product for which a lower VOC standard is specified in Table 1 or for any another source specific rule application, for which there is a lower VOC standard, then the lowest VOC standard shall apply. This provision does not apply to Substrate Specific Adhesive Applications.
- (8) The VOC content of regulated products that are applied with the use of refillable pressurized containers are subject to the VOC limits of this rule.
- (9) Except as provided in subdivision (i) and paragraphs (g)(5) and (g)(6), a person shall not store regulated products which contain VOC in excess of the limits specified in paragraph (c)(1). This provision does not apply if

the person demonstrates that the product is being stored for subsequent shipping to persons for use outside the District or to persons using the product in conjunction with approved air pollution control equipment pursuant to paragraph (c)(5).

- (10) Containers used for mixing VOC-containing regulated products shall be kept closed at all times except when in use or when product is being added or removed.

(d) Recordkeeping Requirements

Records of regulated product usage shall be maintained pursuant to Rule 109.

(e) Test Methods

- (1) The VOC content of regulated products shall be determined by using USEPA Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating, Code of Federal Regulations Title 40, Appendix A, utilizing Procedure B of ASTM Method D2369), SCAQMD Method 304, or SCAQMD Method 313.
- (2) The exempt compound's content shall be determined by Methods 302 and 303 in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples" or ASTM Method D4457-85.
- (3) The VOC content of PVC, CPVC, and ABS pipe cements, adhesive primer for plastic shall be determined by Method 316A in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples."
- (4) The VOC content of cyanoacrylate adhesives shall be determined by Method 316B in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples."
- (5) To determine if a diluent is reactive, the percent of the reactive organic compound that becomes an integral part of the finished materials shall be determined using Appendix A to Subpart PPPP of 40 CFR Part 63—Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

- (6) The efficiency of the control device and the VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by USEPA'S Test Method 18, or Air Resources Board (ARB) Method 422 for the determination of emissions of Exempt Compounds and USEPA's Test Methods 25, 25A, SCAQMD's Method 25.1, or SCAQMD Test Method 25.3. (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) for the determination of total organic compound emissions. Emissions determined to exceed any limits established by this rule through the use of any of the above-referenced test methods shall constitute a violation of the rule.
  - (7) Viscosity will be determined by ASTM D 1084-08 Standard Test Methods for Viscosity of Adhesives.
  - (8) The following classes of compounds: cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine, will be analyzed as exempt compounds for compliance with subdivision (c), only at such time as manufacturers specify which individual compounds are used in the coating formulations and identify the test methods, which, prior to such analysis, have been approved by the USEPA and the SCAQMD, that can be used to quantify the amounts of each exempt compound.
- (f) Administrative Requirements
- (1) Regulated products manufactured after January 1, 2016, shall display the following:
    - (A) Each container shall display the VOC content of the regulated product as recommended for application. VOC content shall be displayed as grams of VOC per liter, excluding water and exempt compounds, or grams of VOC per liter of material for low-solids products, or weight percent VOC for aerosol products. The VOC content shall be determined by calculation based on product formulation or laboratory analysis using the applicable test method in subdivision (e).

- (B) Each container or an associated product data sheet shall display a statement of the manufacturer's recommendations regarding thinning, reducing, or mixing with any other VOC containing material. Mixing recommendations shall specify a ratio which results in a compliant, as applied, product.
  - (C) Each container shall display the date or a date code of manufacture of the contents. A manufacturer utilizing a date code shall file with the Executive Officer of the District an explanation of each date code.
- (2) For each calendar year (January 1 through December 31) beginning in 2014, and continuing with each subsequent calendar year until 2016, a manufacturer or supplier of regulated products shall submit to the District by September 1 of the following calendar year, an annual report of product sales within the District. The report shall include the following information:
- (A) Product manufacturer (as listed on the label);
  - (B) Product name and code;
  - (C) Applicable Rule 1168 category or categories;
  - (D) VOC content less water and exempt solvents as determined by calculation based on product formulation or laboratory analysis;
  - (E) VOC content of material as determined by calculation based on product formulation or laboratory analysis; and
  - (F) Volume sold for use within the District.
- (3) For each calendar year (January 1 through December 31) beginning in 2014, the supplier of regulated products sold to a user under the provisions of paragraph (i)(6) shall submit to the District by September 1 of the following calendar year, an annual report of regulated product sales under the provisions of paragraph (i)(6) within the District. The report shall include the following information:
- (A) Product manufacturer (as listed on the label);
  - (B) Product name and code;
  - (C) VOC content less water and exempt solvents;
  - (D) VOC content of material; and
  - (E) Company name sold to, address and volume sold for each product sold.

- (4) Manufacturers or suppliers of regulated products shall maintain records to verify data used to determine VOC content in preparing their annual quantity and emissions report. The records shall be maintained for three (3) years and made available upon request by the Executive Officer. Such records shall include:
    - (A) Laboratory reports; or
    - (B) Formulation data used for VOC content calculations.
  - (5) The labels of all Top and Trim Adhesives shall include the statement “For Top and Trim Uses Only” prominently displayed.
  - (6) The labels of all Rubber Vulcanization Adhesives shall include the statement “For Rubber Vulcanization Adhesive Uses Only” prominently displayed.
  - (7) The labels of all Pressure Sensitive Adhesive Primers shall include the statement “For Pressure Sensitive Adhesive Primer Uses Only” prominently displayed.
- (g) Prohibition of Sales and Use
- (1) Except as provided in subdivision (i) and paragraphs (c)(5), (c)(6), (g)(4), (g)(5) and (g)(6), no person shall use, supply, sell, or offer for sale a regulated product in the District that at the time of sale exceeds the applicable VOC limits specified in paragraphs (c)(1).
  - (2) Except as provided in subdivision (i) and paragraph (g)(4), no person shall use, supply, sell, or offer for sale a regulated product in the District that contains chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene.
  - (3) On and after January 1, 2016, except as provided in subdivision (i), no person shall use, supply, sell, or offer for sale a regulated product in the District that contains Group II exempt compounds listed in Rule 102 in quantities greater than 0.1 percent by weight. This provision does not apply to cyclic, branched, or linear, completely methylated siloxanes (VMS).
  - (4) The prohibition of sales and use as specified in paragraphs (g)(1), (g)(2) and (g)(3) shall not apply to the following:
    - (A) Regulated products shipped, supplied or sold to persons for use outside the District;

- (B) Any manufacturer or supplier of regulated products provided the product was sold to an independent distributor that was informed in writing, including electronic formats, by the manufacturer or supplier that the regulated product is not to be used in the South Coast Air Quality Management District. Manufacturers utilizing this provision shall maintain notification letters for three (3) years, which shall be made available to the Executive Officer or designee upon request.
  - (5) Any regulated product that is manufactured prior to the effective date of the applicable limit specified in paragraph (c)(1), and that has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be sold, supplied, offered for sale for up to three (3) years after the specified effective date.
  - (6) Any regulated product that is manufactured prior to the effective date of the applicable limit specified in paragraph (c)(1), and that has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be applied for up to three (3) years after the specified effective date.
- (h) **Rule 442 Applicability**  
Any regulated product which is exempt from all or a portion of this rule shall comply with the provisions of Rule 442.
- (i) **Exemptions**
- (1) The provisions of paragraph (c)(1) shall not apply to the following:
    - (A) Adhesives used in tire repair; or
    - (B) Adhesives and/or adhesive application processes in compliance with Rules 1104, 1106, 1128, 1130 and 1130.1.
  - (2) The provisions of this rule shall not apply to adhesives, adhesive primers, caulks, sealants, or sealant primers and associated application processes that are subject to Rule 1124.
  - (3) The provisions of this rule, except subdivisions (f) and (g), shall not apply to regulated products with a VOC content no more than 20 grams per liter, less water and less exempt compounds.

- (4) The provisions of this rule, except paragraphs (g)(2) and (g)(3) shall not apply to regulated products sold in quantities of two ounces or less, excluding packaging.
- (5) The provisions of this rule shall not apply to adhesive tape.
- (6) The provisions of subdivision (c) shall not apply to research and development programs and quality assurance labs. Records shall be maintained in accordance with the provisions of subdivision (d) of this rule.
- (7) The provisions of paragraph (c)(1) shall not apply to a facility that demonstrates that the total volume of non-compliant products is less than 55 gallons per facility per rolling 12-month period. A facility may not use this paragraph to exclude non-compliant adhesives used in architectural applications, contact adhesives, special purpose contact adhesives, and adhesives used on porous substrates. Effective January 1, 2016, a facility may not use this paragraph to exclude non-compliant rubber vulcanization adhesives and top and trim adhesives.
- (8) The provisions of this rule, except paragraphs (g)(2) and (g)(3), shall not apply to adhesives used to glue flowers to parade floats.
- (9) The provisions of subdivision (c) shall not apply to solvent welding operations used in the manufacturing of medical devices.
- (10) Non-compliant aerosol regulated products shall not be subject to the provisions of paragraph (c)(1) provided that 16 ounces (one pound) or less are used per day, per facility, determined on a rolling monthly average. The use of such products shall comply with all applicable CARB regulations.
- (11) The provisions of this rule, except paragraphs (c)(10), (g)(2), (g)(3) and subdivision (d), shall not apply to energy curable adhesives and sealants with a VOC content no more than 50 grams per liter, less water and less exempt compounds.
- (12) Regulated products which weigh one pound or less, or consist of 16 fluid ounces or less, excluding packaging, and are subject to VOC content limits in the California Air Resources Board Consumer Products Regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507 are exempt from the following:
  - (A) Paragraph (c)(9) and subdivisions (f) and (g);

- (B) The provisions of this rule provided they are used by household and institutional consumers or by manufacturing facilities for repair or maintenance.
- (13) The provisions of this rule, except paragraphs (g)(2) and (g)(3), shall not apply to adhesives used to fabricate orthotics and prosthetics under a medical doctor's prescription.
- (14) The provisions of this rule, except paragraph (g)(2) and (g)(3), shall not apply to shoe repair, luggage and handbag adhesives.
- (15) The provisions of paragraph (c)(4) shall not apply to regulated products with a viscosity of 200 centipoise or greater.