

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RULE 1113 -- ARCHITECTURAL COATINGS

*(Adopted Sept. 2, 1977)(Amended Dec. 2, 1977)(Amended Feb. 3, 1978)
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(Amended by California Air Resources Board Oct. 21, 1981)
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(Amended Sept. 6, 1991)(Amended March 8, 1996)(Amended August 9, 1996)
(Amended November 8, 1996)(Amended May 14, 1999)
(Amended July 20, 2001)*

(a) **Applicability**

This rule is applicable to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use in the District that is intended to be applied to stationary structures or their appurtenances, and to mobile homes, pavements or curbs; as well as any person who applies or solicits the application of any architectural coating within the District. The purpose of this rule is to limit the VOC content of architectural coatings used in the District or to allow the averaging of such coatings, as specified, so their actual emissions do not exceed the allowable emissions if all the averaged coatings had complied with the specified limits.

(b) **Definitions**

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

- (1) **AEROSOL COATING PRODUCT** means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground marking and traffic marking applications.
- (2) **APPURTENANCES** are accessories 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.

- (3) ARCHITECTURAL COATINGS are any coatings applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.
- (4) BELOW-GROUND WOOD PRESERVATIVES are wood preservatives formulated to protect below-ground wood.
- (5) BITUMINOUS COATINGS MATERIALS are black or brownish coating materials, soluble in carbon disulfide, consisting mainly of hydrocarbons and which are obtained from natural deposits, or as residues from the distillation of crude petroleum oils, or of low grades of coal.
- (6) BITUMINOUS ROOF COATINGS are coatings formulated and recommended for roofing that incorporate bituminous coatings materials.
- (7) BOND BREAKERS are coatings applied between layers of concrete to prevent the freshly poured top layer of concrete from bonding to the substrate over which it is poured.
- (8) CHEMICAL STORAGE TANK COATINGS are coatings used as interior tank linings for the storage of oxygenated solvents, oxygenated solvent mixtures, and acid based products
- (9) CLEAR BRUSHING LACQUERS are clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in paragraph (d)(7).
- (10) CLEAR WOOD FINISHES are clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.
- (11) COATING is a material which is applied to a surface in order to beautify, protect, or provide a barrier to such surface.
- (12) COLORANTS are solutions of dyes or suspensions of pigments.
- (13) CONCRETE-CURING COMPOUNDS are coatings applied to freshly poured concrete to retard the evaporation of water.
- (14) DRY-FOG COATINGS are coatings which are formulated only for spray application so that when sprayed, overspray droplets dry before falling on floors and other surfaces.

- (15) ESSENTIAL PUBLIC SERVICE COATING is a protective (functional) coating applied to components of power, municipal wastewater, water, bridges and other roadways; transmission or distribution systems during repair and maintenance procedures.
- (16) EXEMPT COMPOUNDS (See Rule 102-Definition of Terms.)
- (17) FIRE-PROOFING EXTERIOR COATINGS are opaque coatings formulated to protect the structural integrity of outdoor steel and other outdoor construction materials and listed by Underwriter's Laboratories, Inc. for the fire protection of steel.
- (18) FIRE-RETARDANT COATINGS are coatings listed by Underwriter's Laboratories, Inc. as fire-retardant coatings with a flame spread index of less than 25.
- (19) FLAT COATINGS are coatings that register a gloss of less than 15 on an 85-degree meter or less than 5 on a 60-degree meter.
- (20) FLOOR COATINGS are opaque coatings that are formulated for application to flooring; including but not limited to decks, porches, gymnasiums, bowling alleys; for purposes of abrasion resistance.
- (21) GRAMS OF VOC PER LITER OF COATING, LESS WATER AND LESS EXEMPT COMPOUNDS, is the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\begin{array}{l} \text{Grams of VOC per Liter of Coating, Less} \\ \text{Water and Less Exempt Compounds} \end{array} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

- 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 coatings that contain reactive diluents, the Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds, shall be calculated by the following equation:

$$\frac{\text{Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds}}{\text{Water and Less Exempt Compounds}} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

- Where:
- W_s = weight of volatile compounds emitted during curing, in grams
 - W_w = weight of water emitted during curing, in grams
 - W_{es} = weight of exempt compounds emitted during curing, in grams
 - V_m = volume of the material prior to reaction, in liters
 - V_w = volume of water emitted during curing, in liters
 - V_{es} = volume of exempt compounds emitted during curing, in liters

- (22) GRAMS OF VOC PER LITER OF MATERIAL is the weight of VOC per volume of material and can be calculated by the following equation:

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

- 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 the material in liters

- (23) GRAPHIC ARTS COATINGS (Sign Paints) are coatings formulated for and hand-applied by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.
- (24) HIGH-TEMPERATURE INDUSTRIAL MAINTENANCE COATINGS are industrial maintenance coatings formulated for and applied to substrates exposed continuously or intermittently to temperatures above 400 degrees Fahrenheit.
- (25) INDUSTRIAL MAINTENANCE COATINGS are coatings, including primers, sealers, undercoaters, intermediate coatings and topcoats formulated for and applied to substrates that are exposed to one or more of the following extreme environmental conditions:
- (A) immersion in water, wastewater, or chemical solutions (aqueous

and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

- (B) acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, chemical mixtures, or solutions;
- (C) repeated exposure to temperatures in excess of 250 degrees Fahrenheit;
- (D) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial solvents, cleaners, or scouring agents; or
- (E) exterior exposure of metal structures.

Effective July 1, 2002, Industrial Maintenance Coatings are not for residential use or for use in areas of industrial, commercial, or institutional facilities not exposed to such extreme environmental conditions, such as office space and meeting rooms

- (26) JAPANS/FAUX FINISHING COATINGS are glazes designed for wet-in-wet techniques used as a stain or glaze to create artistic effects, including but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.
- (27) LACQUERS are clear or pigmented wood finishes, including clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by evaporation without chemical reaction.
- (28) LOW-SOLIDS COATINGS are coatings containing one pound or less of solids per gallon of material.
- (29) MAGNESITE CEMENT COATINGS are coatings formulated for and applied to magnesite cement decking to protect the magnesite cement substrate from erosion by water.
- (30) MASTIC COATINGS are coatings formulated to cover holes and minor cracks and to conceal surface irregularities, and applied in a thickness of at least 10 mils (dry, single coat).
- (31) METALLIC PIGMENTED COATINGS are coatings containing at least 0.4 pound of elemental metallic pigment per gallon (50 grams/liter) of coating as applied.
- (32) MULTI-COLOR COATINGS are coatings which exhibit more than one color when applied and which are packaged in a single container and applied in a single coat.
- (33) NONFLAT COATINGS are coatings that register a gloss of 5 or greater on a 60-degree meter and a gloss of 15 or greater on an 85-degree meter.

- (34) PRE-TREATMENT WASH PRIMERS are coatings which contain a minimum of 1/2 percent acid, by weight, applied directly to bare metal surfaces to provide necessary surface etching.
- (35) PRIMERS are coatings applied to a surface to provide a firm bond between the substrate and subsequent coats.
- (36) QUICK-DRY ENAMELS are non-flat coatings which comply with the following:
 - (i) Shall be capable of being applied directly from the container by brush or roller under normal conditions, normal conditions being ambient temperatures between 60°F and 80°F;
 - (ii) When tested in accordance with ASTM D 1640 they shall: set-to-touch in two hours or less, dry-hard in eight hours or less, and be tack-free in four hours or less by the mechanical test method; and
 - (iii) Shall have a 60° dried film gloss of no less than 70.
- (37) QUICK-DRY PRIMERS, SEALERS, AND UNDERCOATERS are primers, sealers, and undercoaters which are intended to be applied to a surface to provide a firm bond between the substrate and subsequent coats and which are dry-to-touch in one-half hour and can be recoated in two hours (ASTM D 1640). This category will be subsumed by the primers, sealers, and undercoaters category effective January 1, 2002.
- (38) REACTIVE DILUENT is a liquid which is a VOC during application and one in which, through chemical and/or physical reaction, such as polymerization, becomes an integral part of the coating.
- (39) RECYCLED COATINGS are coatings collected through Household Hazardous Waste Collection Programs or other waste minimization and resource recovery programs. Recycled coatings shall be formulated such that not less than 50% of the total weight consists of secondary post-consumer waste paint, with not less than 10% of the total weight consisting of post-consumer waste paint.
- (40) ROOF COATINGS are non-bituminous coatings formulated for application to exterior roofs and for the primary purpose of preventing penetration of the substrate by water, or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall

be considered to be in the metallic pigmented coatings category.

- (41) RUST PREVENTATIVE COATINGS are coatings formulated for use in preventing the corrosion of metal surfaces in residential and commercial situations.
- (42) SANDING SEALERS are clear wood coatings formulated for and applied to bare wood for sanding and to seal the wood for subsequent application of coatings. To be considered a sanding sealer a coating must be clearly labeled as such.
- (43) SEALERS are coatings applied to substrates to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.
- (44) SHELLACS are clear or pigmented coatings formulated solely with the resinous secretions of the lac beetle (*laccifer lacca*), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.
- (45) SOLICIT is to require for use or to specify, by written or oral contract.
- (46) SPECIALTY PRIMERS is a coating formulated and recommended for application to a substrate to seal fire, smoke or water damage; or to condition excessively chalky surfaces. An excessively chalky surface is one that is defined as having chalk rating of four or less as determined by ASTM D-4214 – Photographic Reference Standard No. 1 or the Federation of Societies for Coatings Technology “Pictorial Standards for Coatings Defects”.
- (47) STAINS are opaque or semi-transparent coatings which are formulated to change the color but not conceal the grain pattern or texture.
- (48) SWIMMING POOL COATINGS are coatings specifically formulated to coat the interior of swimming pools and to resist swimming pool chemicals.
- (49) SWIMMING POOL REPAIR COATINGS are chlorinated, rubber-based coatings used for the repair and maintenance of swimming pools over existing chlorinated, rubber-based coatings.
- (50) TINT BASE is an architectural coating to which colorants are added.
- (51) TRAFFIC COATINGS are coatings formulated for and applied to public streets, highways, and other surfaces including, but not limited to, curbs, berms, driveways, and parking lots.
- (52) UNDERCOATERS are coatings formulated and applied to substrates to provide a smooth surface for subsequent coats.

- (53) VARNISHES are clear wood finishes formulated with various resins to dry by chemical reaction on exposure to air.
 - (54) VOLATILE ORGANIC COMPOUND (VOC)
See Rule 102.
 - (55) WATERPROOFING WOOD SEALERS are colorless coatings which are formulated for the sole purpose of preventing penetration of porous substrates by water on wood substrates.
 - (56) WATERPROOFING CONCRETE/MASONRY SEALERS are clear or pigmented film forming compounds that are formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.
 - (57) WOOD PRESERVATIVES are coatings formulated to protect wood from decay or insect attack by the addition of a wood preservative chemical registered by the California Environmental Protection Agency.
- (c) Requirements
- (1) Except as provided in paragraphs (c)(2), (c)(3), (c)(4), and specified coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage any architectural coating for use in the District which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, and no person shall apply or solicit the application of any architectural coating within the District that exceeds 250 grams of VOC per liter of coating as calculated in this paragraph.
 - (2) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified, and no person shall apply or solicit the application of any architectural coating within the District that exceeds the VOC limit as specified in this paragraph. No person shall apply or solicit the application within the District of any industrial maintenance coatings for residential use; or of any rust-preventative coating for industrial use.

TABLE OF STANDARDS
VOC LIMITS

Grams of VOC Per Liter of Coating,
Less Water And Less Exempt Compounds

COATING	Limit*	Effective 1/1/1998	Effective 1/1/1999	Effective 5/14/99	Effective 7/1/2001	Effective 7/1/2002	Effective 1/1/2005	Effective 7/1/2006	Effective 7/1/2008
Bond Breakers	350								
Chemical Storage Tank Coatings	420							100	
Clear Wood Finishes									
Varnish	350								
Sanding Sealers	350								
Lacquer	680	550					275		
Clear Brushing Lacquer	680						275		
Concrete-Curing Compounds	350								
Dry-Fog Coatings	400								
Essential Public Service Coating	420					340		100	
Fire-proofing Exterior Coatings	450		350						
Fire-Retardant Coatings									
Clear	650								
Pigmented	350								
Flats	250				100				50
Floor Coatings	420					100		50	
Graphic Arts (Sign) Coatings	500								
High Temperature Industrial Maintenance Coatings						550		420	
Industrial Maintenance Coatings	420					250		100	
Japans/Faux Finishing Coatings	700		350						
Magnesite Cement Coatings	600		450						
Mastic Coatings	300								
Metallic Pigmented Coatings	500								
Multi-Color Coatings	420	250							
Non-Flat Coatings	250					150		50	
Pigmented Lacquer	680	550					275		
Pre-Treatment Wash Primers	780								
Primers, Sealers, and Undercoaters	350					200		100	
Quick-Dry Enamels	400					250		50	
Quick-Dry Primers, Sealers, and Undercoaters	350**					200		100	
Recycled Coatings				250		250		100	
Roof Coatings	300			250					
Bituminous Roof Coatings	300					250			
Rust Preventative Coatings	420			400				100	
Shellac									
Clear	730								
Pigmented	550								
Specialty Primers	350							100	
Stains	350					250			
Swimming Pool Coatings									
Repair	650								
Other	340								
Traffic Coatings	250	150							
Waterproofing Sealers									
Wood	400					250			
Concrete/Masonry	400								
Wood Preservatives									
Below-Ground	350								
Other	350								

* The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards

** The specified limit applies unless the manufacturer submits a report pursuant to Rule 1113(g)(2).

TABLE OF STANDARDS (cont.)

VOC LIMITS

Grams of VOC Per Liter of Material

<u>COATING</u>	<u>Limit</u>
Low-Solids Coating	120

- (3) If anywhere on the container of any coating listed in the Table of Standards, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the coating may be used as, or is suitable for use as, a coating for which a lower VOC standard is specified in the table or in paragraph (c)(1), then the lowest VOC standard shall apply. This requirement does not apply to the representation of the following coatings in the manner specified:
- (A) lacquer sanding sealers, which may be recommended for use as sanding sealers in conjunction with clear lacquer topcoats;
 - (B) metallic pigmented coatings, which may be recommended for use as primers, sealers, undercoaters, roof coatings, or industrial maintenance coatings;
 - (C) shellacs; and
 - (D) low-solids coatings.
- (4) Except where already required to be in compliance with the previous version of this rule, sale or application of a coating manufactured prior to the effective date of the corresponding standard in the Table of Standards, and not complying with that standard, shall not constitute a violation of paragraph (c)(2) until three years after the effective date of the standard.
- (5) All architectural coating containers used to apply the contents therein to a surface direct from said container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but should not be limited to: drums, buckets, cans, pails, trays or other application containers.
- (6) Averaging Compliance Option
On or after January 1, 2001, in lieu of specific compliance with the applicable limits in the Table of Standards for floor; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; rust preventative; roof; stains; waterproofing wood sealers; industrial maintenance coatings, as well as flats and non-flats (excluding

recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Appendix A, as well as maintain and make available for inspection, records, for at least three years after the end of the compliance period.

(d) **Administrative Requirements**

- (1) Containers for all coatings subject to this rule shall display the date of manufacture of the contents or a code indicating the date of manufacture. The manufacturers of such coatings shall file with the Executive Officer of the District and the Executive Officer of the Air Resources Board an explanation of each code.
- (2) Containers for all coatings subject to the requirements of this rule shall carry a statement of the manufacturer's recommendation regarding thinning of the coating. This recommendation shall not apply to the thinning of architectural coatings with water. The recommendation shall specify that the coating is to be employed without thinning or diluting under normal environmental and application conditions, unless any thinning recommended on the label for normal environmental and application conditions does not cause a coating to exceed its applicable standard.
- (3) Each container of any coating subject to this rule shall display the maximum VOC content of the coating, as supplied, and after any thinning as recommended by the manufacturer. The VOC content of low-solids coatings shall be displayed as grams of VOC per liter of material (excluding any colorant added to the tint bases) and the VOC content of any other coating shall be displayed as grams of VOC per liter of coating (less water and less exempt compounds, and excluding any colorant added to tint bases). VOC content displayed may be calculated using product formulation data, or may be determined using the test method in subdivision (e).
- (4) After January 1, 1998, the coating container label or container shall include the words "Quick-Dry" or shall list the following:

- (A) The recoat time for quick-dry primers, sealers, and undercoaters, or
- (B) The dry-hard time for quick-dry enamels.

Containers and container labels shall not contain the words "Quick-Dry" unless the material meets the dry times specified in the respective definitions or the material complies with the respective general VOC limit for enamels or primers, sealers, and undercoaters.

- (5) The labels of all rust preventative coatings shall include the statement "For Metal Substrates Only" prominently displayed, effective July 1, 2002.
- (6) The labels of all specialty primers shall include the statement "For Fire-, Smoke-, Water-Damaged, or Excessively Chalky Substrates Only" prominently displayed, effective July 1, 2002.
- (7) The labels of all clear brushing lacquers shall include the statements "For brush applications only" and "This product must not be thinned or sprayed", prominently displayed, effective January 1, 2002 until January 1, 2005.
- (8) Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2002 submit an annual report to the Executive Officer until April 1, 2006. The report shall specify the number of gallons of clear brushing lacquers sold in the District during the preceding calendar year, and shall describe the method used by the manufacturer to calculate such sales.

(e) Test Methods

For the purpose of this rule, the following test methods shall be used

- (1) VOC Content of Coatings
 - The VOC content of coatings subject to the provisions of this rule shall be determined by:
 - (A) The United States Environmental Protection Agency (USEPA) Reference Test Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, Code of Federal Regulations Title 40, Part 60, Appendix A) with the exempt compounds' content determined by Method 303 (Determination of Exempt Compounds) in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples" manual, or

(B) Method 304 [Determination of Volatile Organic Compounds (VOC) in Various Materials] in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual.

(C) Exempt Perfluorocarbons

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

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 when manufacturers specify which individual compounds are used in the coating formulations. In addition, the manufacturers must identify the USEPA, ARB, and SCAQMD approved test methods, which can be used to quantify the amount of each exempt compound.

(2) Acid Content of Coatings

The acid content of a coating subject to the provisions of this rule shall be determined by ASTM Test Method D 1613-85 (Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products).

(3) Metal Content of Coatings

The metallic content of a coating subject to the provisions of this rule shall be determined by Method 311 (Determination of Percent Metal in Metallic Coatings by Spectrographic Method) in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual.

(4) Flame Spread Index

The flame spread index of a fire-retardant coating subject to the provisions of this rule shall be determined by ASTM Test Method E 84-91A (Standard Test Method for Surface Burning Characteristics of Building Material) after application to an organic or inorganic substrate, based on the manufacturer's recommendations.

- (5) **Drying Times**
The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating subject to the provisions of this rule shall be determined by ASTM Test Method D 1640 (Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature). The tack-free time of a coating subject to the provisions of this rule shall be determined by ASTM Test Method D 1640, according to the Mechanical Test Method.
 - (6) **Gloss Determination**
The gloss shall be determined by ASTM Test Method D 523 (Specular Gloss).
 - (7) **Equivalent Test Methods**
Other test methods determined to be equivalent after review by the staffs of the District, the California Air Resources Board, and the USEPA, and approved in writing by the District Executive Officer may also be used.
 - (8) **Multiple Test Methods**
When more than one test method or set of test methods are 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 the rule.
 - (9) All test methods referenced in this subdivision shall be the version most recently approved by the appropriate governmental entities.
- (f) **Technology Assessment for Flats; Nonflats; Primers, Sealers, and Undercoaters; Quick-dry Primers, Sealers, and Undercoaters; Quick-dry Enamels; Waterproofing Wood Sealers; Stains; Floor; Rust Preventative; Industrial Maintenance Coatings; and Lacquer Coatings**
- The Executive Officer shall conduct:
- (1) A technology assessment for the future VOC limit for flat coatings as specified in paragraph (c)(2) by July 1, 2000 and July 1, 2007.
 - (2) A technology assessment for the future VOC limit for lacquers specified in paragraph (c)(2) by January 1, 2004.
 - (3) A technology assessment for the future VOC limit for nonflats; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; waterproofing wood sealers; stains floor, rust preventative, and industrial maintenance coatings as specified in paragraph (c)(2) by July 1, 2001 and July 1, 2005.

In conducting the above technology assessments, the Executive Officer shall consider any applicable future California Air Resources Board surveys on architectural coatings.

After each technology assessment, the Executive Officer shall report to the Governing Board as to the appropriateness of maintaining the future VOC limit.

The Executive Officer shall conduct a study to further assess reactivity of architectural coatings.

(g) Exemptions

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

- (A) architectural coatings in containers having capacities of one quart or less, provided that the manufacturer shall submit an annual report to the Executive Officer within three months of the end of each calendar year. The report shall contain information as required by the Executive Officer to monitor the use of the small container exemption. The loss of this exemption due to the failure of the manufacturer to submit an annual report shall apply only to the manufacturer; or
- (B) architectural coatings sold in this District for shipment outside of this District or for shipment to other manufacturers for repackaging; or
- (C) emulsion type bituminous pavement sealers; or
- (D) aerosol coating products.
- (E) Use of stains and lacquers in all areas within the District at an elevation of 4,000 feet or greater above sea level.

(2) Until July 1, 2002, architectural coatings recommended by the manufacturer for use solely as quick-dry primers, sealers and undercoaters, need not comply with the provisions of subdivision (c), so long as the manufacturer submits an annual report to the Executive Officer within three months of the end of each calendar year reporting the number of gallons of coatings sold in California under this exemption.

(3) Notwithstanding the provisions of paragraph (c)(2), a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70 percent and temperature below 65 degrees Fahrenheit, at the time of application provided that:

- (A) the coating is not applied from April 1 to October 31 of any year;
 - (B) the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.
- (4) The January 1, 2005 VOC limit for lacquers shall not be applicable until January 1, 2007 and the July 1, 2008 VOC limit for flat coatings shall not be applicable to any manufacturer which meets all of the following criteria:
- (A) The total gross annual receipts are \$2,000,000 or less, and
 - (B) The total number of employees is 100 or less, and
 - (C) The manufacturer requesting this exemption files a written request with the Executive Officer annually which includes, but is not limited to,
 - (i) The total gross annual receipts for each of the last three years.
 - (ii) The total number of employees for each of the last three years.

For the purposes of determining the total gross annual receipts and the total number of employees, a manufacturer shall include data from all facilities (both within and outside of the District) which they own, operate, have an ownership interest, or are legally affiliated. If a manufacturer exceeds the criteria specified in subparagraphs (g)(4)(A) or (g)(4)(B) any time after the initial request is filed with the Executive Officer, this exemption shall be immediately terminated, the manufacturer shall forfeit any future eligibility for this exemption, and the manufacturer shall be considered in violation of this rule for each and every day that lacquers or flat coatings which do not comply with the respective VOC limit in the Table of Standards are supplied, sold, or offered for sale within the District. The loss of this exemption due to the manufacturer exceeding the criteria in subparagraphs (g)(4)(A) or (g)(4)(B) shall apply only to the manufacturer.

- (5) Manufacturers of recycled coatings must submit a letter to the Executive Officer certifying their status as a Recycled Paint Manufacturer. The manufacturer shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each recycled coating, gallons repackaged and distributed in the District.
- (6) Manufacturers of rust preventative coatings shall submit an annual report

to the Executive Officer within three months of the end of the calendar year. The report shall include for each rust preventative coating, the number of gallons sold in the District.

- (7) Essential Public Service Agencies shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each essential public service coating, the number of gallons used in the District.
- (8) The provisions of paragraph (c) shall not apply to manufacturing facilities which apply coatings to test specimens for purposes of research and development of those coatings.
- (9) The July 1, 2006 VOC limit for nonflats, primers, sealers, and undercoaters, quick-dry enamels, and rust-preventative coatings shall not be applicable until July 1, 2008 to any manufacturer which meets all of the following criteria:
 - (A) The total gross annual receipts are \$5,000,000 or less, and
 - (B) The total number of employees is 100 or less, and
 - (C) The manufacturer requesting this exemption files a written request with the Executive Officer annually which includes, but is not limited to,
 - (i) The total gross annual receipts for each of the last three years.
 - (ii) The total number of employees for each of the last three years

For the purposes of determining the total gross annual receipts and the total number of employees, a manufacturer shall include data from all facilities (both within and outside of the District) which they own, operate, have an ownership interest, or are legally affiliated. If a manufacturer exceeds the criteria specified in subparagraphs (g)(9)(A) or (g)(9)(B) any time after the initial request is filed with the Executive Officer, this exemption shall be immediately terminated, the manufacturer shall forfeit any future eligibility for this exemption, and the manufacturer shall be considered in violation of this rule for each and every day that lacquers or flat coatings which do not comply with the respective VOC limit in the Table of Standards are supplied, sold, or offered for sale within the District. The loss of this exemption due to the manufacturer exceeding the criteria in subparagraphs (g)(9)(A) or (g)(9)(B) shall apply only to the

manufacturer.

- (10) Manufacturers of specialty primers shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each specialty primer, the number of gallons sold in the District.

APPENDIX A: Averaging Provision

- (A) The manufacturer shall demonstrate that actual emissions from the coatings being averaged are less than or equal to the allowable emissions, for the specified compliance period using the following equation:

$$\sum_{i=1}^n G_i M_i \leq \sum_{i=1}^n G_i V_i L_i$$

Where:

$$\sum_{i=1}^n G_i M_i = \text{Actual Emissions}$$

$$\sum_{i=1}^n G_i V_i L_i = \text{Allowable Emissions}$$

G_i = Total Gallons of Product (i) subject to Averaging;

M_i = Material VOC content of Product (i), as pounds per gallon; (as defined in paragraph (b)(21))

V_i = Percent by Volume Solids and VOC in Product i (as defined in paragraph (b)(20))
 = $\frac{V_m - V_w - V_{es}}{V_m}$

For Non-Zero VOC Coatings:

$$= \frac{\text{Material VOC}}{\text{Coating VOC}}$$

For Zero VOC Coatings:

% solids by volume

$$= \frac{\text{Material VOC}}{\text{Coating VOC}}$$

L_i = Regulatory VOC Content Limit for Product (i), as pounds per gallon; (as listed in paragraph (c)(2) Table of Standards)

The averaging is limited to coatings that are designated by the manufacturer. Any coating not designated in the averaging Program shall comply with the VOC limit in the Table of Standards. The manufacturer shall not include any quantity of coatings that it knows or should have known will not be used in the District.

(B) Averaging Program (Program)

At least six months prior to the start of the compliance period, manufacturers shall submit an Averaging Program, which is subject to all the provisions of Rule 221 – Plans and Rule 306 – Plan Fees, to the Executive Officer. Averaging may not be implemented until the Program is approved in writing by the Executive Officer.

Within 45 days of submittal of a complete Program, the Executive Officer shall either approve or disapprove the Program. The Program applicant and the Executive Officer may agree to an extension of time for the Executive Officer to take action on the Program.

(C) General Requirements

The Program shall include all necessary information for the Executive Officer to make a determination as to whether the manufacturer may comply with the averaging requirements over the specified compliance period in an enforceable manner. Such information shall include, but is not limited to, the following:

1. An identification of the contact persons, telephone numbers, and name of the manufacturer who is submitting the Program.
2. An identification of each coating that has been selected by the manufacturer for inclusion in this program that exceeds the applicable VOC limit in the Table of Standards, their VOC content specified in units of both grams of VOC per liter of coating, and grams of VOC per liter of material, and the designation of the coating category.
3. A detailed demonstration showing that the projected actual emissions will not exceed the allowable emissions for a single compliance period that the Program will be in effect. In addition, the demonstration shall include VOC content information for each coating that are below the compliance limit in the Table of Standards. The demonstration shall use the equation specified in paragraph (A) of this Appendix for projecting the actual emissions and allowable emissions during each compliance period. The demonstration shall also include all VOC content levels and projected volume within the District for each coating listed in the Program during each compliance period. The requested data can be summarized in a matrix form.
4. A specification of the compliance period(s) and applicable reporting dates. The length of the compliance period shall not be more than one year or less than six months.

5. An Identification and description of all records to be made available to the Executive Officer upon request, if different than those identified under paragraph (c)(6).
6. An identification and description of specific records to be used in calculating emissions for the program and subsequent reporting, and a detailed explanation as to how those records will be used by the manufacturer to verify compliance with the averaging requirements.
7. A statement, signed by a responsible party for the manufacturer, that all information submitted is true and correct, and that records will be made available to the Executive Officer upon request.

(D) Reporting Requirements

1. For every single compliance period, the manufacturer shall submit a mid-term report listing all coatings subject to averaging during the first half of the compliance period, detailed analysis of the actual and allowable emissions at the end of the mid-term, and an explanation as to how the manufacturer intends to achieve compliance by the end of the compliance period. The report shall be signed by the responsible party for the manufacturer, attesting that all information submitted is true and correct. The mid-term report shall be submitted within 45 days after the midway date of the compliance period. A manufacturer may request, in writing, an extension of up to 15 days for submittal of the mid-term report.
2. Within 60 days after the end of the compliance period or upon termination of the Program, whichever is sooner, the manufacturer shall submit to the Executive Officer a final report, providing a detailed demonstration of the balance between the actual and allowable emissions for the compliance period, an update of any identification and description of specific records used by the manufacturer to verify compliance with the averaging requirement, and any other information requested by the Executive Officer to determine whether the manufacturer complied with the averaging requirements over the specified compliance period. The report shall be signed by the responsible party for the manufacturer, attesting that all information submitted is true and correct, and that records will be made available to the Executive Officer upon request. A manufacturer may request, in writing, an extension of up to 30 days for submittal of the final report.

(E) Renewal of a Program

A Program automatically expires at the end of the compliance period. The manufacturer may request a renewal of the Program by submitting a renewal request that shall include an updated Program, meeting all applicable Program requirements. The renewal request will be considered conditionally approved until the Executive Officer makes a final decision to deny or approve the renewal request based on a determination of whether the manufacturer is likely to comply with the averaging requirements. The Executive Officer shall base such determination on all available information, including but not limited to, the mid-term and final reports of the preceding compliance period. The Executive Officer shall make a decision to deny or approve a renewal request no later than 45 days from the date of the final report submittal, unless the manufacturer and the Executive Officer agree to an extension of time for the Executive Officer to take action on the renewal request.

(F) Modification of a Program

A manufacturer may request a modification of the Program at any time prior to the end of the compliance period. The Executive Officer shall take action to approve or disapprove the modification request no longer than 45 days from the date of its submittal. No modification of the compliance period shall be allowed. A Program need not be modified to specify additional coatings to be averaged that are below the applicable VOC limits.

(G) Termination of a Program

1. A manufacturer may terminate its Program at any time by filing a written notification to the Executive Officer. The filing date shall be considered the effective date of the termination, and all other provisions of this rule including the VOC limits shall immediately thereafter apply. The manufacturer shall also submit a final report 60 days after the termination date. Any exceedance of the actual emissions over the allowable emissions over the period that the Program was in effect shall constitute a separate violation for each day of the entire compliance period.
2. The Executive Officer may terminate a Program if any of the following circumstances occur:
 - (a) The manufacturer violates the requirements of the approved Program, and at the end of the compliance period, the actual emissions exceed the allowable emissions.

(b) The manufacturer demonstrates a recurring pattern of violations and has consistently failed to take the necessary steps to correct those violations.

(H) Change in VOC Limits

If the VOC limits of a coating listed in the Program are amended such that its effective date is less than one year from the date of adoption, the affected manufacturer may base its averaging on the prior limits of that coating until the end of the compliance period immediately following the date of adoption.

(I) Labeling

Each container of any coating that is included in averaging program, and that exceeds the applicable VOC limit in the Table of Standards shall display the following statement: "This product is subject to the averaging provisions of SCAQMD Rule 1113". A symbol specified by the Executive Officer may be used as a substitute.

(J) Violations

The exceedance of the allowable emissions for any compliance period shall constitute a separate violation for each day of the compliance period. However, any violation of the requirements of the Averaging Provision of this rule, which the violator can demonstrate, to the Executive Officer, did not cause or allow the emission of an air contaminant and was not the result of negligent or knowing activity may be considered a minor violation.