

**RULE 323. ARCHITECTURAL COATINGS. (Adopted 10/18/1971, revised 2/24/1975, 8/22/1977, readopted 10/23/1978, revised 6/11/1979, 3/11/1985, 2/20/1990, 3/16/1995, 7/18/1996, and 11/15/2001)**

**A. Applicability**

This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.

**B. Exemptions**

The requirements of this rule shall not apply to:

1. Architectural coatings sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging;
2. Architectural coatings sold in containers with a volume of one liter (1.057 quart) or less; or
3. Any aerosol coating product.

**C. Definitions**

1. **“Adhesive”** means any chemical substance applied to bond two surfaces together other than by mechanical means.
2. **“Aerosol coating product”** means a pressurized coating product containing pigments or resins that dispenses product ingredients with a propellant, and is packaged in a disposable can for hand-held application, or for application with specialized ground traffic/marketing equipment.
3. **“Antenna coating”** means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that receive or transmit electromagnetic signals.
4. **“Antifouling coating”** means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the United States Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq.*) and with the California Department of Pesticide Regulation.
5. **“Appurtenances”** means accessories to a stationary structure coated at the site of installation, whether installed or detached, including, but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.
6. **“Architectural coatings”** means coatings applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule.

7. **“Bitumens”** means black or brown coating materials including but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or are residues from the distillation of crude petroleum or of coal.
8. **“Bituminous roof coating”** means a coating that incorporates bitumens and that is labeled and formulated exclusively for roofing.
9. **“Bituminous roof primer”** means a primer that incorporates bitumens and that is labeled and formulated exclusively for roofing.
10. **“Bond breakers”** means coatings labeled and formulated for application between layers of concrete to prevent the freshly poured top layer of concrete from bonding to the layer over which it is poured.
11. **“Clear brushing lacquers”** means 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, that are intended exclusively for application by brush, and that are labeled as specified in Section E.1.c of this Rule.
12. **“Clear wood coatings”** means clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.
13. **“Coating”** means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.
14. **“Colorant”** means a concentrated pigment dispersion in water, solvent, and/or binder added to an architectural coating after packaging in sale units to produce the desired color.
15. **“Concrete curing compounds”** means coatings labeled and formulated for application to freshly poured concrete to retard the evaporation of water.
16. **“Dry fog coatings”** means coatings labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.
17. **“Exempt compound”** means a compound identified as exempt under the definition of “volatile organic compounds.” Exempt compounds content of a coating shall be determined by South Coast Air Quality Management District Method 303-91 (Revised August 1996), incorporated by reference in Section G.5.j of this Rule.
18. **“Faux finishing coating”** means a coating labeled and formulated 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.
19. **“Fire-resistive coating”** means an opaque coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. Building code officials must approve the fire-resistive coating and the testing agency. The fire-resistive coating shall be tested in accordance with American Society of Testing and Materials Designation E 119-98, incorporated by reference in Section G.5.b of this Rule.
20. **“Fire-retardant coatings”** means coatings labeled and formulated to retard ignition and flame spread, that have been fire tested and rated by a testing agency approved by building code officials

to bring building and construction materials into compliance with federal, state, and local building code requirements. Building code officials must approve the fire-retardant coating and the testing agency. The fire-retardant coating shall be tested in accordance with American Society of Testing and Materials Designation E 84-99, incorporated by reference in Section G.5.a of this Rule.

21. **“Flat coating”** means a coating not defined under any other definition in this rule that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to American Society of Testing and Materials Designation D 523-89 (1999), incorporated by reference in Section G.5.c of this Rule.
22. **“Floor coating”** means an opaque coating labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces that may be subject to foot traffic.
23. **“Flow coating”** means a coating labeled and formulated exclusively for electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.
24. **“Form-release compounds”** means coatings labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.
25. **“Graphic arts coatings (sign paints)”** means coatings labeled and formulated for hand-application 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.
26. **“High-temperature coatings”** means high performance coatings labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 400 degrees Fahrenheit (204 degrees Celsius).
27. **“Industrial maintenance coatings”** means high-performance architectural coatings including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions, and labeled as specified in Section E.1.d of this Rule:
  - 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 (121 degrees Celsius);
  - d. Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or,
  - e. Exterior exposure of metal structures and structural components.
28. **“Lacquers”** means clear or opaque wood coatings, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.
29. **“Low solids coating”** A coating containing 0.12 kilogram or less of solids per liter (1.0 pound or less of solids per gallon) of coating material.

30. **“Magnesite cement coatings”** means coatings labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.
31. **“Mastic texture coatings”** means coatings labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, and applied in a thickness of at least 10 mils (0.010 inch) dry film thickness.
32. **“Metallic pigmented coatings”** means coatings containing at least 48 grams (0.4 pounds per gallon) of elemental metallic pigment per liter of coating as applied when tested in accordance with South Coast Air Quality Management District Method 318-95, incorporated by reference in Section G.5.d of this Rule.
33. **“Multi-color coatings”** means coatings that are packaged in a single container and that exhibit more than one color when applied in a single coat.
34. **“Nonflat coating”** means a coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to American Society of Testing and Materials Designation D 523-89 (1999), incorporated by reference in Section G.5.c of this Rule.
35. **“Nonflat - high gloss coating”** means a nonflat coating that registers a gloss of 70 or above on a 60-degree meter according to American Society of Testing and Materials Designation D 523-89 (1999), incorporated by reference in Section G.5.c of this Rule.
36. **“Nonindustrial use”** means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.
37. **“Post-consumer coating”** means a finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer, and does not include manufacturing wastes.
38. **“Pre-treatment wash primers”** means primers that contain a minimum of 0.5 percent acid by weight, when tested in accordance with American Society of Testing and Materials Designation D 1613-96, incorporated by reference in Section G.5.e of this Rule, that are labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.
39. **“Primers”** means coatings labeled and formulated for application to substrates to provide a firm bond between the substrate and subsequent coats.
40. **“Quick-dry enamels”** means non-flat coatings that are labeled as specified in Section E.1.h and formulated to have the following characteristics:
- a. Shall be capable of being applied directly from the container under normal conditions, normal conditions being ambient temperatures between 60 degrees Fahrenheit and 80 degrees Fahrenheit (16 and 27 degrees Celsius);
  - b. When tested in accordance with American Society of Testing and Materials Designation 1640-95, incorporated by reference in Section G.5.f, 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 method test;
  - c. Has a dried film gloss of 70 or above on a 60-degree meter.

41. **“Quick-dry primers, sealers, and undercoaters”** means primers, sealers and undercoaters that are dry to touch in one half hour and can be recoated in two hours when tested in accordance with American Society of Testing and Materials ASTM 1640-95, incorporated by reference in Section G.5.f of this Rule.
42. **“Recycled coating”** means an architectural coating formulated such that not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.
43. **“Residential”** means areas where people reside or lodge including, but not limited to single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.
44. **“Roof coatings”** means non-bituminous coatings labeled and formulated exclusively for application to exterior roofs primarily to prevent penetration of the substrate by water, or to reflect heat and ultraviolet radiation. Metallic pigmented roof coatings that 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.
45. **“Rust preventive coating”** means a coating formulated exclusively for nonindustrial use to prevent the corrosion of metal surfaces and labeled as specified in Section E.1.f of this Rule.
46. **“Sanding sealers”** means clear or semi-transparent wood coatings labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent application of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.
47. **“Sealers”** means coatings labeled and formulated for application to a substrate to prevent subsequent coatings from being adsorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.
48. **“Secondary coating (rework)”** means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.
49. **“Shellacs”** means clear or opaque 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.
50. **“Shop application”** means application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).
51. **“Solicit”** means to require for use or to specify, by written or oral contract.
52. **“Specialty flats”** means self priming flat products used only to perform one of the following functions: repair fire, smoke or water damage; neutralize odors; block stains; or coat acoustical materials without affecting their acoustical abilities.
53. **“Specialty primer, sealer, and undercoater”** means a coating labeled as specified in Section E.1.g of this Rule, and that is formulated for application to a substrate to seal fire, smoke or water damage; to condition excessively chalky surfaces, or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by American Society of Testing and Materials Designation D 4214-98, incorporated by reference in Section G.5.g of this Rule.

54. **“Stain”** means a clear, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not to conceal the grain pattern or texture.
55. **“Swimming pool coatings”** means coatings labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals.
56. **“Swimming pool repair and maintenance coatings”** means rubber based coatings labeled and formulated for the repair and maintenance of swimming pools over existing rubber based coatings.
57. **“Temperature-indicator safety coating”** means a coating labeled and formulated as a color-changing indicator coating to monitor the temperature and safety of the substrate, underlying piping, or underlying equipment, and to apply to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).
58. **“Tint base”** means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.
59. **“Traffic marking coatings”** means coatings labeled and formulated for marking and striping streets, highways, and other traffic surfaces including, but not limited to curbs, berms, driveways, parking lots, sidewalks and airport runways.
60. **“Undercoaters”** means coatings labeled and formulated for application to substrates to provide a smooth surface for subsequent coats.
61. **“Varnishes”** means clear or semi-transparent wood coatings, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.
62. **“Volatile organic compound (VOC)”** means any volatile compound containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:  
methane;  
methylene chloride (dichloromethane);  
1,1,1-trichloroethane (methyl chloroform);  
trichlorofluoromethane (CFC-11);  
dichlorodifluoromethane (CFC-12);  
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);  
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);  
chloropentafluoroethane (CFC-115);  
chlorodifluoromethane (HCFC-22);  
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);  
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);  
1,1-dichloro-1-fluoroethane (HCFC-141b);  
1-chloro-1,1-difluoroethane (HCFC-142b);  
trifluoromethane (HFC-23);  
pentafluoroethane (HFC-125);  
1,1,2,2-tetrafluoroethane (HFC-134);  
1,1,1,2-tetrafluoroethane (HFC-134a);  
1,1,1-trifluoroethane (HFC-143a);  
1,1-difluoroethane (HFC-152a);  
cyclic branched or linear completely methylated siloxanes;  
the following classes of perfluorocarbons:  
(A) cyclic, branched, or linear, completely fluorinated alkanes;  
(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;  
(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds only to carbon and fluorine; and the following low-reactive organic compounds which have been exempted by the United States Environmental Protection Agency:

acetone;

ethane;

parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene);

perchloroethylene; and

methyl acetate.

- 63. **“VOC content”** means the weight of VOC per volume of coating, calculated according to the procedure specified in Section G.1 of this Rule.
- 64. **“Waterproofing sealers”** means coatings that are labeled, formulated and applied for the sole purpose of protecting porous substrates by preventing the penetration of water.
- 65. **“Waterproofing concrete/masonry sealer”** means a clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.
- 66. **“Wood preservative”** means a coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the United States Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

#### **D. Standards**

- 1. **VOC Content Limits:** Except as provided in Sections D.2, D.3, D.8, and D.9, no person shall:
  - a. manufacture, blend, or repack for sale within the District;
  - b. supply, sell, or offer for sale within the District; or
  - c. solicit for application or apply within the District, any architectural coating with a VOC content in excess of the corresponding limit specified in Table 1, after the specified date in Table 1.
- 2. **Most Restrictive VOC Limit:** If anywhere on the container of any architectural coating or any sticker or label affixed thereto, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Table 1, then the most restrictive volatile organic compound shall apply. This provision does not apply to the representation of the following coatings:
  - a. Lacquer coatings (including lacquer sanding sealers);
  - b. Metallic pigmented coatings;
  - c. Shellacs;
  - d. Fire-retardant coatings;
  - e. Pretreatment wash primers;
  - f. Industrial maintenance coatings;
  - g. Low-solids coatings;

- h. Wood preservatives;
- i. High temperature coatings;
- j. Temperature-indicator safety coatings;
- k. Antenna coatings;
- l. Antifouling coatings;
- m. Flow coatings;
- n. Bituminous roof primers;
- o. Specialty primers, sealers, and undercoaters.

3. **Sell-Through of Coatings:**

- a. A coating manufactured prior to the effective date specified for that coating in Table 1 may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in Table 1 may be applied at any time, both before and after the specified date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This subsection does not apply to any coating that complies with the future effective January 1, 2003 or January 1, 2004 limits or that does not display the date or date-code required by Section E.1.a of this Rule.
- b. A coating included in an approved Averaging Program that does not comply with the specified limit in Table 1 may be sold, supplied, or offered for sale for up to three years after the end of the compliance period specified in the approved Averaging Program. In addition, such a coating may be applied at any time, both during and after the compliance period. This subsection does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California", or a substitute symbol specified by the Executive Officer of the California Air Resources Board. This subsection shall remain in effect until January 1, 2008.

- 4. **Painting Practices:** All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.
- 5. **Thinning:** No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Table 1.
- 6. **Rust Preventive Coatings:** Effective January 1, 2004, no person shall apply or solicit the application of any rust preventive coating for industrial use, unless such a rust preventive coating complies with the industrial maintenance coating VOC limit specified in Table 1.
- 7. **Coatings Not Listed in Table 1:** For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table 1, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in Section G.5.c and the corresponding flat or nonflat VOC limit shall apply.



8. **Lacquers:** Notwithstanding the provisions of Section D.1 of this Rule, 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 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.
9. **Averaging Compliance Option:** On or after January 1, 2003, in lieu of compliance with the specified limits in Table 1 for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; bituminous roof coatings, rust preventive coatings; stains; waterproofing sealers, 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 manufacturer 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. This Section and Appendix A shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.

#### **E. Container Labeling Requirements**

1. Each manufacturer of any architectural coating subject to this rule shall display the information listed in subsections E.1.a through E.1.h on the coating container (or label) in which the coating is sold or distributed.
  - a. **Date Code:** The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the California Air Resources Board.
  - b. **Thinning Recommendations:** A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating be applied without thinning.
  - c. **VOC Content:** Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section G.2 of this rule. The equations in Section G.1 shall be used to calculate VOC content.
  - d. **Industrial Maintenance Coatings:** In addition to the information specified in Sections D.1.a, D.1.b, and D.1.c, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the descriptions listed below:
    - i. "For industrial use only."
    - ii. "For professional use only."
    - iii. "Not for residential use" or "Not intended for residential use."
  - e. **Clear Brushing Lacquers:** Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed."

- f. **Rust Preventive Coatings:** Effective January 1, 2003, the labels of all rust preventive coatings shall prominently display the statement "For Metal Substrates Only."
- g. **Specialty Primers, Sealers and Undercoaters:** Effective January 1, 2003, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed below:
  - i. "For blocking stains."
  - ii. "For fire-damaged substrates."
  - iii. "For smoke-damaged substrates."
  - iv. "For water-damaged substrates."
  - v. "For excessively chalky substrates."
- h. **Quick-Dry Enamels:** Effective January 1, 2003, the labels of all quick-dry enamels shall prominently display the words "Quick-Dry" and the dry-hard time.
- i. **Nonflat – High Gloss Coatings:** Effective January 1, 2003, the labels of all nonflat – high gloss coatings shall prominently display the words "High Gloss."

#### F. Reporting Requirements

1. **Clear Brushing Lacquers:** Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the California Air Resources Board. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
2. **Rust Preventive Coatings:** Each manufacturer of rust preventive coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the California Air Resources Board. The report shall specify the number of gallons of rust preventive coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
3. **Specialty Primers, Sealers, and Undercoaters:** Each manufacturer of specialty primers, sealers, and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the California Air Resources Board. The report shall specify the number of gallons of specialty primers, sealers, and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
4. **Toxic Exempt Compounds:** For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, report to the Executive Officer of the California Air Resources Board the following information for products sold in the State during the preceding year:
  - a. the product brand name and a copy of the product label with legible usage instructions;
  - b. the product category listed in Table 1 to which the coating belongs;
  - c. the total sales in California during the calendar year to the nearest gallon;
  - d. the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.
5. **Recycled Coatings:** Manufacturers of recycled coatings must submit a letter to the Executive Officer of the California Air Resources Board certifying their status as a Recycled Paint

Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the California Air Resources Board. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.

6. **Bituminous Coatings:** Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the California Air Resources Board. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.

## G. Compliance Provisions and Test Methods

1. **Calculation of VOC Content:** For the purpose of determining compliance with the VOC content limits in Table 1, the VOC content of a coating shall be determined by using the procedures described in Section G.1.a or G.1.b, as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

- a. With the exception of low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds. Determine the VOC content using equation 1 as follows:

$$\text{VOC Content} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})} \quad (1)$$

Where:

VOC Content	= grams of VOC per liter of coating
$W_s$	= weight of volatiles, in grams
$W_w$	= weight of water, in grams
$W_{ec}$	= weight of exempt compounds, in grams
$V_m$	= volume of coating, in liters
$V_w$	= volume of water, in liters
$V_{ec}$	= volume of exempt compounds, in liters

- b. For low solids coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds. Determine the VOC content using equation 2 as follows:

$$\text{VOC Content}_{ls} = \frac{(W_s - W_w - W_{ec})}{V_m} \quad (2)$$

Where:

$\text{VOC Content}_{ls}$	= the VOC content of a low solids coating in grams of VOC per liter of coating
$W_s$	= weight of volatiles, in grams
$W_w$	= weight of water, in grams
$W_{ec}$	= weight of exempt compounds, in grams
$V_m$	= volume of coating, in liters.

2. **VOC Content of Coatings:** To determine the physical properties of a coating in order to perform the calculations in G.1.a and G.1.b, the reference method for VOC content is United States Environmental Protection Agency Method 24, incorporated by reference in Section G.5.k, except as provided in Sections G.3 and G.4. An alternative method to determine the VOC content of coatings is South Coast Air Quality Management District Method 304-91 (revised February 1996) incorporated by reference in Section G.5.k. The exempt compounds content shall be determined by South Coast Air Quality Management District Method 303-91 (Revised August 1996), incorporated by reference in Section G.5.j. To determine the VOC content of a coating, the manufacturer may use United States Environmental Protection Agency Method 24, or an alternative method as provided in Section G.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 results will govern, except when an alternative method is approved as specified in Section G.3. The Control Officer may require the manufacturer to conduct a Method 24 Analysis.
3. **Alternative Test Methods:** Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section G.2, after review and approved in writing by the staffs of the District, the California Air Resources Board and the United States Environmental Protection Agency, may also be used.
4. **Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multicomponent coatings used as traffic coatings shall be conducted according to a modification of United States Environmental Protection Agency USEPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section G.5.l. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.
5. **Test Methods:** The following test methods are incorporated by reference herein, and shall be used to test coatings subject to the provisions of this rule:
  - a. **Flame Spread Index:** The flame spread index of a fire-retardant coating shall be determined by American Society of Testing and Materials Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section C, Fire Retardant Coating).
  - b. **Fire Resistance Rating:** The fire resistance rating of a fire-resistive coating shall be determined by American Society of Testing and Materials Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section C, Fire-Resistive Coating).
  - c. **Gloss Determination:** The gloss of a coating shall be determined by American Society of Testing and Materials Designation D 523-89 (1999), "Standard Test Method for Specular Gloss" (see Section C, Flat Coating, Nonflat Coating, Nonflat – High Gloss Coating, and Quick-Dry Enamel).
  - d. **Metal Content of Coating:** The metallic content of a coating shall be determined by South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section C, Metallic Pigmented Coating).
  - e. **Acid Content of Coatings:** The acid content of a coating shall be determined by American Society of Testing and Materials Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint,

Varnish, Lacquer, and Related Products” (see Section C, Pre-treatment Wash Primer).

- f. **Drying Times:** The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by American Society of Testing and Materials Designation 1640-95, Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature” (see Section C, Quick-Dry Enamel and Quick-Dry Primer, Sealer, and Undercoater). The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of the American Society of Testing and Materials Designation 1640-95.
- g. **Surface Chalkiness:** The chalkiness of a surface shall be determined using American Society of Testing and Materials Designation 4214-98, “Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films” (see Section C, Specialty Primer, Sealer, and Undercoater).
- h. **Exempt Compounds – Siloxanes:** Exempt compounds that are cyclic, branched or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section G by Bay Area Air Quality Management District Method 43, “Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials,” *BAAQMD Manual of Procedures*, Volume III, adopted November 6, 1996 (see Section C, Volatile Organic Compound, and Section G.2)
- i. **Exempt Compounds – Parachlorobenzotrifluoride (PCBTF):** The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section G by Bay Area Air Quality Management District Method 41, “Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride,” *BAAQMD Manual of Procedures*, Volume III, adopted December 20, 1995 (see Section C, Volatile Organic Compound and Section G.2)
- j. **Exempt Compounds:** The content of exempt compounds shall be analyzed by South Coast Air Quality Management District Method 303-91 (revised 1996), “Determination of Exempt Compounds,” *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section C, Volatile Organic Compounds and Section G.2).
- k. **VOC Content of Coatings:** The VOC content of coating shall be determined by United States Environmental Protection Agency Method 24 as it exists in Appendix A of 40 CFR part 60, “Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings” (see Section G.2).
- l. **Alternative VOC Content of Coatings:** The VOC content of coatings may be analyzed either by United States Environmental Protection Agency Method 24 or South Coast Air Quality Management District Method 304-91 (revised 1996), “Determination of Volatile Organic Compounds (VOC) in Various Materials,” *SCAQMD Laboratory Methods of Analysis for Enforcement Samples*
- m. **Methacrylate Traffic Marking Coatings:** The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedure in 40 CFR part 59, subpart D, Appendix A, “Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings”(September 11, 1998)(see Section G.4).

Table 1

## VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

Limits are expressed in grams of VOC per liter<sup>a</sup> of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

COATING CATEGORY	EFFECTIVE JULY 18, 1996	EFFECTIVE November 15, 2001	EFFECTIVE JANUARY 1, 2003
<b>Flat Coatings</b>	(250) <sup>d</sup>	250	100
<b>Nonflat Coatings</b>	(250)	250	150
<b>Nonflat – High Gloss Coatings</b>	(250)	250	250
<b>Specialty Coatings</b>			
Antenna Coatings	340 <sup>e</sup>	530	530
Antifouling Coatings	340 <sup>e</sup>	400	400
Bituminous Roof Coatings	300	300	300
Bituminous Roof Primers	350 <sup>f</sup>	350	350
Bond Breakers	350	350	350
Clear Wood Coatings:			
• Clear Brushing Lacquers	350	680	680
• Lacquers (including lacquer sanding sealers)	350	550	550
• Sanding Sealers (other than lacquer sanding)	350	350	350
• Varnishes	350	350	350
Concrete Curing Compounds	350	350	350
Dry Fog Coatings	400	400	400
Faux Finishing Coatings	(250)	350	350
Fire Resistive Coatings	350	350	350
Fire-Retardant Coatings:			
• Clear	650	650	650
• Opaque	350	350	350
Floor Coatings	(250)	250	250
Flow Coatings	340 <sup>e</sup>	420	420
Form-Release Compounds	250	250	250
Graphic Arts Coatings (Sign Paints)	500	500	500
High Temperature Coatings	420	420	420
Industrial Maintenance Coatings	340	340	250 (1/1/04) <sup>c</sup>
Low Solids Coatings	(250)	120 <sup>b</sup>	120 <sup>b</sup>
Magnesite Cement Coatings	450	450	450
Mastic Texture Coatings	300	300	300
Metallic Pigmented Coatings	500	500	500
Multi-Color Coatings	420	420	250
Pre-Treatment Wash Primers	420	420	420
Primers, Sealers, and Undercoaters	350	350	200
Quick-Dry Enamels	250	250	250
Quick-Dry Primers, Sealers, and Undercoaters	350	350	200
Recycled Coatings	(250)	250	250
Roof Coatings	300	250 <sup>i</sup>	250
Rust Preventive Coatings	340 <sup>e</sup>	400	400

<b>COATING CATEGORY</b>	<b>EFFECTIVE JULY 18, 1996</b>	<b>EFFECTIVE November 15, 2001</b>	<b>EFFECTIVE JANUARY 1, 2003</b>
Shellacs:			
• Clear	730	730	730
• Opaque	550	550	550
Specialty Primers, Sealers, and Undercoaters	350	350	350
Stains	350	350	250
Swimming Pool Coatings	340	340	340
Swimming Pool Repair and Maintenance Coatings	340	340	340
Temperature-Indicator Safety Coatings	420 <sup>g</sup>	550	550
Traffic Marking Coatings	250	150 <sup>i</sup>	150
Waterproofing Sealers	400	400	250
Waterproofing Concrete/Masonry Sealers	400 <sup>h</sup>	400	400
Wood Preservatives	350	350	350

<sup>a</sup>Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams VOC per liter.

<sup>b</sup>Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds.

<sup>c</sup>Effective date is January 1, 2004.

<sup>d</sup>Table 1 includes new coating categories not in current Rule 323. Parentheses indicate VOC limits that apply due to the 250 grams/liter default provision in current Rule 323.D.1.

<sup>e</sup>Categorized as Industrial Maintenance Coatings.

<sup>f</sup>Categorized as Primers.

<sup>g</sup>Categorized as High Temperature Coatings.

<sup>h</sup>Categorized as Waterproofing Sealers.

<sup>i</sup>National Rule limit currently in effect.

**APPENDIX A:  
AVERAGING PROVISIONS**



## A. AVERAGING PROVISIONS

- A.1 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:

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

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

$G_i$  = Total Gallons of Product (i) subject to Averaging;  
 $M_i$  = Material VOC Content of Product (i), in pounds per gallon;

$$M_i = \frac{W_s - W_w - W_{ec}}{V_m}$$

$V_i$  = Percent by Volume Solids and VOC in Product (i);

$$V_i = \frac{V_m - V_w - V_{ec}}{V_m}$$

Where:  $W_s$ ,  $W_w$ ,  $W_{ec}$ ,  $V_m$ ,  $V_w$ , and  $V_{ec}$  are defined in Section G.1, except that in this Appendix, weights are in pounds and volumes are in gallons.

For Non-Zero VOC Coatings:

$$V_i = \frac{\text{Material VOC (also known as VOC Actual)}}{\text{Coating VOC (also known as VOC Regulatory)}}$$

$$\text{Where : Coating VOC} = \frac{W_s - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

For Zero VOC Coatings:

$V_i$  = Percent Solids by Volume

$L_i$  = Regulatory VOC Content Limit for Product (i), in pounds per gallon (listed in Table 1)

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 Table 1. The manufacturer shall not include any quantity of coatings that it knows or should have known will not be used in the State, if statewide coatings data are used. If the district-specific coating data are

used, the manufacturer shall not include any quantity of coating that it knows or should have known will not be used in the District.

A.1.1 In addition to the requirements specified in Section A.1, manufacturers shall not include in an Averaging Program any coating with a volatile organic compound content in excess of the following volatile organic compound content, for the applicable categories.

<b>Averaging Categories and VOC Ceiling (Maximum VOC Allowed)</b>		
Category	Rule VOC Limit (In effect or effective 1/1/2003 or 1/1/2004)	Averaging VOC Ceiling (Maximum)
Flat Coating	100	250
Nonflat coating	150	250
Floor Coatings	250	400
Industrial Maintenance Coatings	250	420
Primers, Sealers, and Undercoaters	200	350
Quick-Dry Primers, Sealers, and Undercoaters	200	450
Quick-Dry Enamels	250	400
Roof Coatings	250	300
Bituminous Roof Coatings	300	300
Rust Preventive Coatings	400	400
Stains	250	350
Waterproofing Sealers	250	400

## **A.2 AVERAGING PROGRAM (PROGRAM)**

At least six months prior to the start of the compliance period, manufacturers shall submit an Averaging Program to the Executive Officer of the California Air Resources Board. As used in this Appendix A, "Executive Officer" means the Executive Officer of the California Air Resources Board. 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.

## **A.3 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:

- A.3.1 An identification of the contact persons, telephone numbers, and name of the manufacturer who is submitting the Program.
- A.3.2 An identification of each coating that has been selected by the manufacturer for inclusion in this Program that exceeds the applicable VOC limit in Table 1, its VOC content specified in units of both VOC actual and VOC regulatory, and the designation of the coating category.
- A.3.3 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

is below the compliance limit in Table 1. The demonstration shall use the equation specified in subsection A.1 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 sold within the State for each coating listed in the Program during each compliance period. The requested data can be summarized in a matrix form.

- A.3.4 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.
- A.3.5 An identification and description of all records to be made available to the Executive Officer upon request, if different than those identified under subsection A.3.6.
- A.3.6 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.
- A.3.7 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.

#### **A.4 REPORTING REQUIREMENTS**

- A.4.1 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 14 days for submittal of the mid-term report.
- A.4.2 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 report listing all coatings subject to averaging during the compliance period, providing a detailed demonstration of the balance between the actual and allowable emissions for the compliance period, 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.

#### **A.5 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 the 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.

## **A.6 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.

## **A.7 TERMINATION OF A PROGRAM**

A.7.1 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.

A.7.2 The Executive Officer may terminate a Program if any of the following circumstances occur:

A.7.2.1 The manufacturer violates the requirements of the approved Program, and at the end of the compliance period, the actual emissions exceed the allowable emissions.

A.7.2.2 The manufacturer demonstrates a recurring pattern of violations and has consistently failed to take the necessary steps to correct those violations.

## **A.8 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.

## **A.9 LABELING**

Each container of any coating that is included in Averaging Program, and that exceeds the applicable VOC limit in Table 1 shall display the following statement: "This product is subject to architectural coatings averaging provision in California." A symbol specified by the Executive Officer may be used as a substitute.

## **A.10 VIOLATIONS**

The exceedance of the allowable emissions for any compliance period shall constitute a separate violation of 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.

## **A.11 SUNSET OF AVERAGING PROVISION**

The averaging provision set forth in Appendix A shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.