



# Air Pollution Control Board

## San Diego County Air Pollution Control District

### GOVERNING BODY

GREG COX  
First District

DIANNE JACOB  
Second District

DAVE ROBERTS  
Third District

RON ROBERTS  
Fourth District

BILL HORN  
Fifth District

### AGENDA ITEM

**DATE:** June 24, 2015

**AP02**

**TO:** Air Pollution Control Board

**SUBJECT:** NOTICED PUBLIC HEARING - ADOPTION OF PROPOSED NEW  
RULE 67.0.1 - ARCHITECTURAL COATINGS AND REPEAL OF EXISTING  
RULE 67.0 -ARCHITECTURAL COATINGS DISTRICTS: ALL)

#### Overview

This is a request for the Air Pollution Control Board to adopt proposed new Rule 67.0.1 to reduce the volatile organic compounds (VOC) emitted from the application of coatings to stationary structures in San Diego County. These coatings include a variety of residential, commercial and industrial paints, primers, sealers and other products. When these architectural coatings are applied, VOC are emitted into the air and react with other air pollutants to form ground level ozone, a major component of smog. San Diego County Air Pollution Control District (District) has programs and regulations in place designed to meet the current California or National Ambient Air Quality Standards for ozone, however, the county currently does not meet these standards. As a result, the District is required to update its regulations, as necessary, to reflect the latest advances in technology to further reduce ozone-forming emissions. Adoption of Rule 67.0.1 will help fulfill these State and national requirements.

If adopted, Rule 67.0.1 will replace existing Rule 67.0, which was last updated in 2001. Since 2001, coating manufacturers have developed new architectural coatings that contain less VOC while meeting appearance, durability and other performance needs. Proposed Rule 67.0.1 reflects the development of new, lower VOC content coatings and is based on a Suggested Control Measure (SCM) developed in 2007 by the California Air Resources Board that is designed to further reduce VOC emissions and encourage consistency in the regulation of architectural coatings across the State. Several air districts throughout California have already adopted the requirements found in the SCM and as a result complying coatings are now readily available.

If adopted, on January 1, 2016, the proposed new Rule 67.0.1 would go into effect and existing Rule 67.0 would be automatically repealed. Coatings manufactured before January 1, 2016, may be sold for up to three years and applied at any time. This will allow time for affected businesses and consumers to sell or use their inventories of non-compliant coatings and then transition to the new coatings required by Rule 67.0.1.

Substantial outreach was conducted during the rule development process to ensure that the

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architectural coatings industry would not be negatively affected. No significant concerns were raised and all known issues have been addressed.

### **Recommendation(s)**

#### **AIR POLLUTION CONTROL OFFICER**

1. Find that the adoption of proposed new Rule 67.0.1 and repeal of existing Rule 67.0 are categorically exempt from the provisions of the California Environmental Quality Act pursuant to California Code of Regulations, Title 14, Section 15308, as an action taken to assure the protection of the environment, where the regulatory process involves procedures for protection of the environment, and pursuant to California Code of Regulations, Title 14, Section 15061(b)(3), since it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.
2. Adopt the Resolution entitled RESOLUTION ADOPTING NEW RULE 67.0.1 - ARCHITECTURAL COATINGS AND REPEALING RULE 67.0 - ARCHITECTURAL COATINGS OF REGULATION IV OF THE RULES AND REGULATIONS OF THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT.

### **Fiscal Impact**

There is no fiscal impact associated with the adoption of the resolution. If adopted, there will be no change in net General Fund cost and no additional staff years.

### **Business Impact Statement**

Adopting proposed new Rule 67.0.1 will not adversely impact the business community. Only one company in San Diego County manufactures architectural coatings and it already complies with the VOC content limits and other requirements of the proposed rule. Businesses involved in the distribution, sales and application of architectural coatings are familiar with the requirements of proposed new Rule 67.0.1 due to the California Air Resources Board's 2007 SCM and corresponding requirements already in place throughout much of California. A socioeconomic impact assessment (Attachment B) conducted by the District demonstrates that adopting the proposed rule will not have a significant economic impact on affected industries or small businesses in San Diego County.

### **Advisory Board Statement**

At its meeting on August 13, 2014, with a quorum present, the Air Pollution Control District Advisory Committee voted unanimously in support of the Air Pollution Control District's recommendations.

### **Background**

San Diego County does not meet the current California and National Ambient Air Quality Standards for ozone and therefore is classified as an ozone nonattainment area. Both State and federal laws require the District to adopt and implement rules to control emissions of ozone

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precursors, which include VOC and oxides of nitrogen (NO<sub>x</sub>). In addition, as control technologies advance and new or tighter limits on air pollutant emissions become feasible, the District is required to update its rules accordingly and the proposed rule is a result of this requirement.

Existing Rule 67.0 regulates VOC emissions from the manufacture, sale and use of architectural coatings that include a variety of residential, commercial and industrial paints, stains, varnishes and other products. Existing Rule 67.0 was first adopted in 1988 and last amended in 2001. In 2007, the California Air Resources Board (CARB) approved a new SCM for architectural coatings that included lower VOC content limits for several coatings and other requirements based on the latest achievements in coating formulation technology. Additionally, CARB adopted a resolution strongly encouraging local air districts to adopt the 2007 SCM as written. Several air districts throughout California have since adopted the requirements of the SCM and, as a result, complying coatings are now readily available.

To ensure clarity, and due to the large number of revisions to existing Rule 67.0 that would be necessary to reflect the 2007 SCM, the District now proposes repealing Rule 67.0 and adopting proposed new Rule 67.0.1 in its place. Like Rule 67.0, proposed new Rule 67.0.1 will regulate VOC emissions from architectural coatings used for painting stationary structures and their accessories. The rule requires any person who manufactures, supplies, sells, offers for sale, applies or solicits for application any architectural coating within San Diego County to comply with all applicable provisions of the rule, including VOC content limits, labeling and reporting requirements.

Proposed new Rule 67.0.1 provides a three-year sell-through period for architectural coatings manufactured before its effective date. In addition, architectural coatings purchased before the rule's effective date may be applied at any time, both before and after the effective date. If adopted, proposed new Rule 67.0.1 will take effect on January 1, 2016. On that same date, Rule 67.0 will be automatically repealed.

During development of proposed new Rule 67.0.1, District staff conducted a public workshop to discuss the proposed requirements with affected parties. The workshop was attended by 18 people, including representatives of out-of-state paint manufacturers and an industry group, architectural coatings distributors, sellers and users. No significant concerns were raised at the workshop and all known issues have been addressed. Additional outreach is planned upon adoption of the proposed rule, including distribution of an advisory to affected parties to enhance awareness of the new requirements.

### **Socioeconomic Impact Assessment**

Section 40728.5 of the State Health and Safety Code requires the District to perform an assessment of the socioeconomic impacts when adopting, amending, or repealing a rule that will significantly affect air quality or emission limitations. Proposed new Rule 67.0.1 will affect emission limitations by establishing more stringent VOC emission standards for architectural coatings. Accordingly, a Socioeconomic Impact Assessment has been prepared (Attachment B),

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which shows that proposed new Rule 67.0.1 will not have a significant economic impact on either the affected industry or on small businesses in San Diego County.

### **Environmental Statement**

The California Environmental Quality Act (CEQA) requires environmental review for certain actions. CARB determined that no significant adverse environmental impacts would occur as a result of an air district adopting the provisions of the 2007 SCM for architectural coatings. The District conducted a preliminary review of whether CEQA applies to the adoption of Rule 67.0.1. Proposed new Rule 67.0.1 will reduce VOC emissions from architectural coatings in San Diego County by approximately 32%, or 840 tons per year. District staff determined that the adoption of Rule 67.0.1 and repeal of Rule 67.0 are categorically exempt from the provisions of CEQA pursuant to California Code of Regulations, Title 14, Section 15308, as an action taken to assure the protection of the environment, where the regulatory process involves procedures for protection of the environment, and pursuant to Section 15061(b)(3), since it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.

### **Linkage to the County of San Diego Strategic Plan**

Today's proposed actions support the Sustainable Environments Initiative in the County of San Diego's 2015–2019 Strategic Plan with an objective to enhance the quality of the environment by focusing on sustainability, pollution prevention and strategic planning. Proposed new Rule 67.0.1 will reduce air pollutant emissions and improve air quality in San Diego County.

Respectfully submitted,



SARAH E. AGHASSI  
Deputy Chief Administrative Officer



ROBERT J. KARD  
Air Pollution Control Officer

### **ATTACHMENT(S)**

- Attachment A – Resolution Adopting New Rule 67.0.1 - Architectural Coatings and Repealing Rule 67.0 - Architectural Coatings, of Regulation IV of the Rules and Regulations of the San Diego County Air Pollution Control District
- Attachment B – Socioeconomic Impact Assessment
- Attachment C – Comparative Analysis
- Attachment D – Incremental Cost-Effectiveness Analysis
- Attachment E – Workshop Report
- Attachment F – Existing Rule 67.0 - Architectural Coatings to be Repealed

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**AGENDA ITEM INFORMATION SHEET**

**REQUIRES FOUR VOTES:** ☐ Yes ☒ No

**WRITTEN DISCLOSURE PER COUNTY CHARTER SECTION 1000.1 REQUIRED**  
☐ Yes ☒ No

**PREVIOUS RELEVANT BOARD ACTIONS:**

December 12, 2001 (2), Amendment of Rule 67.0 – Architectural Coatings

**BOARD POLICIES APPLICABLE:**

N/A

**BOARD POLICY STATEMENTS:**

N/A

**MANDATORY COMPLIANCE:**

N/A

**ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):**

N/A

**ORIGINATING DEPARTMENT:** AIR POLLUTION CONTROL DISTRICT

**OTHER CONCURRENCES(S):** N/A

**CONTACT PERSON(S):**

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**RESOLUTION ADOPTING NEW RULE 67.0.1 – ARCHITECTURAL COATINGS  
AND REPEALING RULE 67.0 – ARCHITECTURAL COATINGS, OF  
REGULATION IV OF THE RULES AND REGULATIONS OF THE  
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT**

On motion of Member Jacob, seconded by Member Cox, the following resolution is adopted:

**WHEREAS**, the San Diego County Air Pollution Control Board (Board), pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

**WHEREAS**, said Board now desires to amend said Rules and Regulations; and

**WHEREAS**, notice has been given and a public hearing has been held relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code and Section 51.102 of the Code of Federal Regulations; and

**WHEREAS**, pursuant to Section 40727 of the Health and Safety Code, the San Diego County Air Pollution Control Board makes the following findings:

- (1) (Necessity) The adoption of proposed new Rule 67.0.1 is necessary in order to implement federal requirements for Reasonably Available Control Technology and State requirements for all feasible control measures to achieve the ambient air quality standards for ozone by reducing emissions of volatile organic compounds in the County of San Diego, and the repeal of Rule 67.0 is necessary in order to maintain clarity of requirements for those affected;
- (2) (Authority) The adoption of proposed new Rule 67.0.1 and repeal of Rule 67.0 are authorized by Health and Safety Code Section 40702;
- (3) (Clarity) Proposed new Rule 67.0.1 and repeal of Rule 67.0 can be easily understood by persons directly affected by them;
- (4) (Consistency) The adoption of proposed new Rule 67.0.1 and repeal of Rule 67.0 are in harmony with, and not in conflict with or contrary to, existing statutes, court decisions, and State and federal regulations;
- (5) (Non-duplication) The adoption of proposed new Rule 67.0.1 and repeal of Rule 67.0 will not duplicate existing District, state, or federal requirements;

- (6) (Reference) The adoption of proposed new Rule 67.0.1 and repeal of Rule 67.0 are necessary to comply with: federal law, Clean Air Act Section 182(b)(2), which requires implementation of Reasonably Available Control Technology on stationary sources of volatile organic compound emissions; and state law, California Health and Safety Code Section 40914(b)(2), which requires adoption of every feasible control measure to reduce ozone-precursor emissions;

**WHEREAS**, the Air Pollution Control Board further finds pursuant to Health and Safety Code Section 40001 that adoption of proposed new Rule 67.0.1 will facilitate the attainment of ambient air quality standards; and

**WHEREAS**, the Air Pollution Control Board further finds that Rule 67.0 is now duplicative of proposed new Rule 67.0.1, and will be rendered obsolete upon the effective date of proposed new Rule 67.0.1; and

**WHEREAS**, the Air Pollution Control Board further finds that an analysis comparing proposed new Rule 67.0.1 with applicable requirements of federal and local regulations has been prepared pursuant to Health and Safety Code Section 40727.2; and

**WHEREAS**, the Air Pollution Control Board further finds that an incremental cost-effectiveness analysis pursuant to Health and Safety Code Section 40920.6(a) has been prepared for proposed new Rule 67.0.1 and has been made available for public review and comment, and has been actively considered; and

**WHEREAS**, the Air Pollution Control Board further finds that an assessment of the socioeconomic impacts of the proposed new Rule 67.0.1 and repeal of Rule 67.0 has been prepared pursuant to Health and Safety Code Section 40728.5 and has been actively considered, and that the requirements of paragraphs (2) and (4) of Health and Safety Code Section 40728.5(b) do not apply and therefore are waived pursuant to Health and Safety Code Section 40728.5(e).

**NOW THEREFORE IT IS RESOLVED AND ORDERED** by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be, and hereby are amended as follows:

1. Proposed new Rule 67.0.1 is to read as follows:

**RULE 67.0.1. ARCHITECTURAL COATINGS** (Adopted *(date of adoption)*)

**(a) APPLICABILITY**

(1) Except as provided in Section (b), this rule is applicable to any person who manufactures, blends or repackages, supplies, sells, offers for sale, applies, or solicits the application of any architectural coating for use within San Diego County.

(2) Rule 66.1 shall not apply to any coating subject to this rule.

(b) **EXEMPTIONS**

This rule shall not apply to:

- (1) Any architectural coating that is sold or manufactured for use outside of San Diego County or for shipment to other manufacturers for reformulation or repackaging.
- (2) Any aerosol coating product.
- (3) Emulsion-type bituminous pavement sealers subject to District's Rule 67.7 (Cutback and Emulsified Asphalts), and applied to roads.
- (4) Any architectural coating sold in a container with a volume of one liter (1.057 quart) or less, provided that sales data of such coatings are submitted in accordance with the requirements of Subsection (f)(1), upon request of the Executive Officer of CARB or San Diego County Air Pollution Control Officer.

(c) **DEFINITIONS**

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

- (1) "**Adhesive**" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.
- (2) "**Aerosol Coating Product**" means a pressurized coating containing pigments or resins that dispenses coating product ingredients by means of a propellant, and is packaged in a disposable can either for hand-held application or for use in specialized equipment for ground traffic marking applications.
- (3) "**Aluminum Roof Coating**" means a coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 lbs/gallon) as determined in accordance with South Coast Air Quality Management District's (SCAQMD) Test Method 318-95, incorporated by reference in Subsection (f)(2)(ii)(G).
- (4) "**Appurtenance**" means any accessory 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, fire escapes and window screens.
- (5) "**Architectural Coating**" means coating to be applied to stationary structures and/or their appurtenances at the site of installation (stationary source), to portable buildings including mobile homes at the site of installation, to pavements, or to curbs.



Coatings applied in off-site shops or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings.

(6) “**ASTM**” means ASTM International.

(7) “**Basement Specialty Coating**” means a clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below grade surfaces. Basement Specialty Coatings must meet the following criteria:

(i) Be capable of withstanding at least 10 psi of hydrostatic pressure as determined in accordance with ASTM D7088-08 incorporated by reference in Subsection (f)(2)(ii)(H); and

(ii) Be resistant to mold and mildew growth determined in accordance with ASTM D3273-12 and achieve a microbial growth rating of 8 or more as determined in accordance with ASTM D3274-09(2013), both incorporated by reference in Subsection (f)(2)(ii)(H).

(8) “**Bitumens**” means black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(9) “**Bituminous Roof Coating**” means a coating which incorporates bitumens and is labeled and formulated exclusively for roofing.

(10) “**Bituminous Roof Primer**” means a primer which incorporates bitumens, is labeled and formulated exclusively for roofing and intended for preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

(11) “**Bond Breaker**” means a coating labeled and formulated for application between layers of concrete to prevent a freshly-poured top layer of concrete from bonding to the layer over which it is poured.

(12) “**CARB**” means the California Air Resources Board.

(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 dispersion of a concentrated pigment in water, solvent and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(15) “**Concrete Curing Compound**” means a coating labeled and formulated for application to freshly poured concrete to perform the following functions:

- (i) Retard the evaporation of water; or
- (ii) Harden or dust proof the surface of freshly poured concrete.

(16) “**Concrete/Masonry Sealer**” means a clear or opaque coating labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:

- (i) Prevent penetration of water;
- (ii) Provide resistance against abrasion, acids, alkalis, mildew, staining or ultraviolet light;
- (iii) Harden or dustproof the surface of aged or cured concrete.

(17) “**Driveway Sealer**” means a coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

- (i) Fill cracks;
- (ii) Seal surface to provide protection;
- (iii) Restore or preserve the appearance.

(18) “**Dry Fog Coating**” means a coating labeled and formulated only for spray application to ensure that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(19) “**Exempt Compound**” means the same as defined in Rule 2.

(20) “**Faux Finishing Coating**” means a coating labeled and formulated to use as:

- (i) A glaze or textured coating to create artistic effects including, but not limited to, dirt, old age, smoke damage, suede, simulated marble or wood grain; or
- (ii) A decorative coating to create a metallic, iridescent, or pearlescent appearance that contains at least 48 g/liter (0.4 lbs/gallon) of pearlescent mica pigment or other pearlescent pigment as applied; or
- (iii) A decorative coating to create a metallic appearance that contains less than 48 g/liter (0.4 lbs/gal) of elemental metallic pigment, as applied, determined by SCAQMD Test Method 318-95, incorporated by reference in Subsection(f)(2)(ii)(K); or
- (iv) A decorative coating to create a metallic appearance that requires a clear topcoat to prevent the degradation of the finish under the normal use conditions. This

coating must contain more than 48 g/liter (0.4 lbs/gal) of elemental metallic pigment, as applied, determined by SCAQMD Test Method 318-95, incorporated by reference in Subsection (f)(2)(ii)(K); or

(v) A clear topcoat to seal and protect a Faux Finishing coating defined in this Subsection (c)(20), sold and used solely as part of a Faux Finishing coating system and labeled in accordance with Subsection (e)(2)(i).

(21) “**Fire-Resistive Coating**” means a coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. This coating category includes sprayed fire-resistive materials and intumescent coatings that are used to bring structural materials into compliance with federal, state, and local building code requirements. The fire resistive coatings shall be tested in accordance with ASTM E119-14, incorporated by reference in Subsection (f)(2)(ii)(I). The fire-resistive coatings and the testing agency must also be approved by building code officials.

(22) “**Flat Coating**” means a coating that is not described under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter, or less than 5 on a 60-degree meter in accordance with ASTM D523-14 incorporated by reference in Subsection (f)(2)(ii)(J).

(23) “**Floor Coating**” means an opaque coating labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic.

(24) “**Form-Release Compound**” means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may be made of wood, metal, or some material other than concrete.

(25) “**Graphic Arts Coating or Sign Paint**” means a coating labeled and formulated for hand application by artists using brush, air 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 Coating**” means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 400°F (204°C).

(27) “**Industrial Maintenance Coating**” means high performance architectural coatings, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to various substrates, including floors, labeled as specified in Subsection (e)(2)(ii) and exposed to one or more of the following extreme environmental conditions:

(i) Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous), or chronic exposure of interior surfaces to moisture condensation; or

(ii) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, chemical mixtures or solutions; or

(iii) Frequent exposure to temperature above 250°F (121°C); or

(iv) Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleansers, or scouring agents; or

(v) Exterior exposure of metal structures and structural components.

(28) “**Intumescent**” is a material that swells as a result of heat exposure, thus increasing in volume and decreasing in density.

(29) “**Low-Solids Coating**” means a coating that contains one pound or less of solids per gallon (120 grams or less of solids per liter) of coating material. The VOC content of low-solids coatings shall be calculated as VOC content of material in accordance with Subsection (d)(6)(ii).

(30) “**Magnesite Cement Coating**” means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(31) “**Manufacturer’s Maximum Thinning Recommendation**” means the maximum recommended thinning ratio that is indicated on the label or lid of the coating container.

(32) “**Mastic Texture Coating**” means a coating labeled and formulated to cover holes and minor cracks, conceal surface irregularities and applied in a single coat of at least 0.010 inch (10 mils) dry film thickness.

(33) “**Medium Density Fiberboard (MDF)**” means a composite wood product, panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat.

(34) “**Metallic Pigmented Coating**” means a coating labeled and formulated to provide a metallic appearance. The coating must contain at least 48 g/liter of coating (0.4 lbs/gallon) of elemental metallic pigment (excluding zinc), as applied and as tested by SCAQMD Test Method 318-95, incorporated by reference in Subsection (f)(2)(ii)(K). This coating category does not include Zinc-Rich Primers or coatings applied to roofs.

(35) “**Multi-Color Coating**” means a coating labeled and formulated to exhibit more than one color when applied in a single coat and packaged in a single container.

(36) “**Nonflat Coating**” means a coating that is not described by any other definition of 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 as measured in accordance with ASTM D523-14, incorporated by reference in Subsection (f)(2)(ii)(J).

(37) “**Nonflat-High Gloss Coating**” means a nonflat coating that is not described in any other definition in this rule and that registers a gloss of 70 or above on a 60 degree meter as measured in accordance with ASTM D523-14, incorporated by reference in Subsection (f)(2)(ii)(J). Nonflat-High Gloss coatings must be labeled in accordance to Subsection (e)(2)(iii).

(38) “**Particle Board**” means a composite wood product panel, molding, or other building component composed of cellulosic material (usually wood) in the form of discrete particles, as distinguished from fibers, flakes, or strands, which are pressed together with resin.

(39) “**Pearlescent**” means exhibiting various colors depending on the angle of illumination and viewing, as observed in mother-of-pearl.

(40) “**Plywood**” means a panel consisting of layers of wood veneers or composite core pressed together with resin. Plywood includes panels made by either hot or cold pressing (with resin) veneers to a platform.

(41) “**Post-Consumer Coating**” means a finished coating generated by a business or a consumer that has served its intended end uses, and is recovered from or otherwise diverted from the waste stream for the purpose of recycling.

(42) “**Pretreatment Wash Primer**” means a primer that contains a minimum of 0.5 percent acid, by weight, and labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats. The acidity of a Pretreatment Wash Primer shall be measured by ASTM D1613-06(2012) incorporated by reference in Subsection (f)(2)(ii)(F).

(43) “**Primers, Sealers, and Undercoaters**” mean coatings labeled and formulated for one or more of the following purposes:

- (i) To provide a firm bond between the substrate and the subsequent coatings;
- (ii) To prevent subsequent coatings from being absorbed by the substrate;
- (iii) To prevent harm to subsequent coatings by materials in the substrate;
- (iv) To provide a smooth surface for the subsequent application of coatings;
- (v) To provide a clear finish coat to seal the substrate;
- (vi) To block materials from penetrating into or leaching out of the substrate.

(44) “**Reactive Penetrating Sealer**” means a clear or pigmented coating labeled and formulated for application to above-grade concrete and masonry to provide protection from water and waterborne contaminants, including but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate. This coating lines the pores of concrete and masonry with hydrophobic coating, but does not form a surface film.

Reactive Penetrating Sealers must be labeled as such according to the requirements of Subsection (e)(2)(v) and also meet the following requirements:

(i) Improve water repellency after application on concrete or masonry by at least 80% verified on standardized test specimens in accordance with ASTM C67-14, ASTM C97/C97M-09 or ASTM C140/C140M-14b, incorporated by reference in Subsection (f)(2)(ii)(M); and

(ii) Not reduce the water transmission rate after application on concrete or masonry by more than 2% verified on standardized test specimens in accordance with ASTM E96/E96M-14, incorporated by reference in Subsection (f)(2)(ii)(M).

In addition, reactive penetrating sealers labeled and formulated for vehicular traffic surface chloride screening must meet the performance criteria in the National Cooperative Highway Research 244 (1981) incorporated by reference in Subsection (f)(2)(ii)(M).

(45) “**Recycled Coating**” means an architectural coating formulated to contain a minimum of 50% by volume of post-consumer coating, with a maximum of 50% by volume of secondary industrial or virgin materials.

(46) “**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.

(47) “**Roof Coating**” means a non-bituminous coating labeled and formulated for application to roofs for the primary purpose of preventing water penetration, reflecting ultraviolet light, or reflecting solar radiation.

(48) “**Rust Preventative Coating**” means a coating labeled and formulated to prevent the corrosion of metal surfaces for the following applications:

(i) Direct-to-metal coating; or

(ii) Coating intended for application over rusty, previously coated metal surfaces.

The Rust Preventative Coating category does not include coatings that are required to be applied as a topcoat over a primer, or coatings that are intended for use on wood or

other non-metallic surfaces. Rust Preventative Coatings must be used only for metal surfaces and labeled as such in accordance to Subsection (e)(2)(iv).

(49) “**Secondary Industrial Materials**” mean products or by-products of the paint manufacturing processes that are of known composition and have economic value but can no longer be used for their intended purpose.

(50) “**Semitransparent Coating**” means a coating that contains binders and colored pigments and is formulated to change the color of the surface but not conceal its grain patterns or texture.

(51) “**Shellac**” means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laccifer lacca*), and formulated to dry by evaporation without a chemical reaction.

(52) “**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.

(53) “**Solicit**” means to require for use or to specify, by written or oral contract.

(54) “**Specialty Primers, Sealers, and Undercoaters**” mean coatings formulated for application to a substrate to block water-soluble stains resulting from fire damage, smoke damage, or water damage.

(55) “**Stain**” means a semitransparent or opaque coating labeled and formulated to change the color of a surface, but not to conceal the grain pattern or texture.

(56) “**Stone Consolidant**” means a coating labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants are for professional use only and must be labeled according to the requirements of Subsection (e)(2)(vi). Stone Consolidants must be specified and used in accordance with ASTM E2167-01(2008), incorporated by reference in Subsection (f)(2)(ii)(N).

(57) “**Swimming Pool Coating**” means a coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

(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 Coating**” means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways. This coating category also includes Methacrylate Multicomponent Coatings used as traffic marking

coatings. The VOC content of Methacrylate Multicomponent Coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR Part 59, Subpart D, Appendix A, incorporated by reference in Subsection (f)(2)(ii)(L).

(60) “**Tub and Tile Refinish Coating**” means a clear or opaque coating labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and Tile Refinish coatings must have all of the following properties:

(i) Scratch hardness of 3H or more and a gouge hardness of 4H or more. Scratch hardness must be determined on bonderite 1000, in accordance with ASTM D3363-05(2011)e2, incorporated by reference in Subsection (f)(2)(ii)(O).

(ii) Weight loss of 20 milligrams or less after 1000 cycles. Weight loss must be determined with CS 17 wheels on bonderite 1000, in accordance with ASTM D4060-14, incorporated by reference in Subsection (f)(2)(ii)(O).

(iii) Withstand 1000 hours of more of exposure, with few or no #8 blisters. This must be determined on unscribed bonderite, in accordance with ASTM D4585/D4585M-13 and ASTM D714-02(2009), incorporated by reference in Subsection (f)(2)(ii)(O).

(iv) Adhesion rating of 4B or better after 24 hours recovery. Adhesion rating must be determined by on unscribed bonderite, in accordance with ASTM D4585/D4585M-13 and ASTM D3359-09e2, incorporated by reference in Subsection (f)(2)(ii)(O).

(61) “**Veneer**” means thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

(62) “**Virgin Materials**” mean materials that contain no secondary industrial materials or post-consumer coatings.

(63) “**Volatile Organic Compound (VOC)**” means the same as defined in Rule 2.

(64) “**VOC Content Actual**” means the weight of VOC per total volume of coating, including any water and exempt compounds, and calculated as specified in Subsection (d)(6)(ii).

(65) “**VOC Content Regulatory**” also known as “VOC content, less water and exempt compounds”, means the weight of VOC per volume of coating, excluding the volume of water and exempt compounds, and calculated as specified in Subsection (d)(6)(i).

(66) “**VOC Content of Material**” means the same as VOC content actual.



(67) **“Waterproofing Membrane”** means a clear or opaque coating labeled and formulated for application to concrete and masonry surfaces to provide a seamless coat that prevents any penetration of water into the substrate. These coatings are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. Waterproofing Membranes must meet the following criteria:

(i) Coating must be applied in a single coat of at least 25 mils (0.025 inch) dry film thickness; and

(ii) Coating must meet or exceed the requirements of ASTM C836/C836M-12 incorporated by reference in Subsection (f)(2)(ii)(P).

The Waterproofing Membranes do not include topcoats that meet the definition of Concrete/Masonry Sealers (e.g., parking deck topcoats, pedestrian deck topcoats).

(68) **“Wood Coating”** means a coating labeled according to the requirements of Subsection (e)(2)(vii) and formulated only for application to wood substrates. The Wood Coating category includes the following clear and semitransparent coatings: lacquers, varnishes, sanding sealers, penetrating oils, clear stains and wood conditioners used as undercoats, and wood sealers used as topcoats. The Wood Coating category also includes the following opaque coatings: opaque lacquers, opaque sanding sealers and opaque lacquer undercoaters. The Wood Coating category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces; or coatings intended for substrates other than wood.

(69) **“Wood Preservative”** means a coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

(70) **“Wood Substrate”** means a product made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood Substrate does not include items comprised of simulated wood.

(71) **“Zinc-Rich Primer”** means a coating labeled according to the requirements of Subsection (e)(2)(viii) that also meets all of the following specifications:

(i) Contains at least 65 weight percent of total solids as metallic zinc powder or zinc dust;

(ii) Formulated for application to metal substrates to provide a firm bond between the substrate and subsequent coatings; and

(iii) Intended for professional use only and labeled as such in accordance with the labeling requirements of Subsection (e)(2)(viii).

(d) **STANDARDS**

(1) **VOC Content Limits**

With the exception of low-solids coatings, VOC content limits of architectural coatings in Table 1 below are expressed as VOC content regulatory. VOC content limits of low-solids coatings are expressed as VOC content actual (material).

Except as provided in Section (b) and Subsections (d)(2), (d)(3) and (d)(4) no person shall:

- (i) manufacture, blend, or repackage for use within San Diego County;
- (ii) supply, sell, or offer for sale within San Diego County; or
- (iii) solicit for application or apply within San Diego County, any architectural coating with a VOC content in excess of the corresponding limits specified below:

**Table 1. VOC Content of Coatings\***

<b>Coating Categories</b>	<b>VOC</b>	<b>Content</b>
<b>General Coatings</b>	<b>Grams/liter</b>	<b>Lbs/gallon</b>
Flat Coatings	50	0.4
Nonflat Coatings	100	0.8
Nonflat-High Gloss Coatings	150	1.3
<b>Specialty Coatings</b>	<b>Grams/liter</b>	<b>Lbs/gallon</b>
Aluminum Roof Coatings	400	3.3
Basement Specialty Coatings	400	3.3
Bituminous Roof Coatings	50	0.4
Bituminous Roof Primers	350	2.9
Bond Breakers	350	2.9
Concrete Curing Compounds	350	2.9
Concrete / Masonry Sealers	100	0.8
Driveway Sealers	50	0.4
Dry Fog Coatings	150	1.3
Faux Finishing Coatings	350	2.9
Fire Resistive Coatings	350	2.9
Floor Coatings	100	0.8
Form Release Compounds	250	2.1
Graphic Arts Coatings (Sign Paints)	500	4.2
High Temperature Coatings	420	3.5
Industrial Maintenance Coatings	250	2.1
Low-solids Coatings**	120	1.0
Magnesite Cement Coatings	450	3.8
Mastic Texture Coatings	100	0.8
Metallic Pigmented Coatings	500	4.2

Multi-color Coatings	250	2.1
Pretreatment Wash Primers	420	3.5
Primers, Sealers and Undercoaters	100	0.8
Reactive Penetrating Sealers	350	2.9
Recycled Coatings	250	2.1
Roof Coatings	50	0.4
Rust Preventative Coatings	250	2.1
Shellacs: Clear	730	6.1
Opaque	550	4.6
Specialty Primers, Sealers and Undercoaters	100	0.8
Stains	250	2.1
<b>Coating Categories</b>	<b>VOC</b>	<b>Content</b>
<b>Specialty Coatings</b>	<b>Grams/liter</b>	<b>Lbs/gallon</b>
Stone Consolidants	450	3.8
Swimming Pool Coatings	340	2.8
Traffic Marking Coatings	100	0.8
Tub and Tile Refinish Coatings	420	2.9
Waterproofing Membranes	250	2.1
Wood Coatings	275	2.3
Wood Preservatives	350	2.9
Zinc-Rich Primers	340	2.8

\*Thinned to the manufacturer's maximum thinning recommendations excluding any colorant added to tint bases.

\*\*VOC content of low-solids coatings is calculated as VOC content actual (material).

## (2) Coatings Not Listed in Table I

For any coating that does not conform with any of the definitions for the specialty coating categories listed in Table I, the VOC content limit shall be determined by classifying this coating, based on its gloss, as either a flat coating, nonflat coating or a nonflat-high gloss coating, defined in Subsections (c)(22), (c)(36) or (c)(37), as applicable. The corresponding VOC content limit for a coating category classified by this determination shall apply.

## (3) Most Restrictive VOC Content Limits

If a coating meets the definition in Section (c) for one or more specialty coating categories listed in Table 1, then that coating is not required to meet the VOC Content limits for Flat, Nonflat, or Nonflat-High Gloss coatings, but is required to meet the VOC content limit for the applicable specialty coating category listed in Table 1 then the most restrictive VOC content limits shall apply.

With the exception of the specialty category coatings specified below, if a coating is recommended for use in more than one specialty categories listed in Table 1, the most restrictive VOC content limit shall apply. This requirement applies to usage recommendations that appear anywhere on the coating container, or on any label or sticker

affixed to the container, or in any sales, advertising, or technical literature supplied by the manufacturer or anyone acting on his/her behalf.

This provision does not apply to the specialty coating categories specified below:

- (i) Aluminum roof coatings,
  - (ii) Bituminous roof primers,
  - (iii) High-temperature coatings,
  - (iv) Industrial maintenance coatings,
  - (v) Low-solids coatings,
  - (vi) Metallic pigmented coatings,
  - (vii) Pretreatment wash primers,
  - (viii) Shellacs,
  - (ix) Specialty primers, sealers, and undercoaters
  - (x) Wood coatings,
  - (xi) Wood preservatives, and
  - (xii) Zinc-Rich primers.
- (4) Sell-Through of Coatings

A coating manufactured prior to January 1, 2016 may be sold, supplied, or offered for sale for up to three years after January 1, 2016, provided that the coating complied with all applicable provisions of current Rule 67.0 (effective 12/12/01, incorporated by reference). Such coating may also be applied at any time, both before and after January 1, 2016.

This Subsection does not apply to any coating that does not display the date or date-code required by Subsection (e)(1)(i).

- (5) Thinning

No person who applies or solicits the application of any architectural coating shall apply or specify the application of a coating that is thinned to exceed the applicable VOC limit specified in Table 1.

- (6) Calculations of VOC Content of Architectural Coatings

For the purpose of determining compliance with the VOC content limits in Table I, the VOC content of a coating shall be calculated as follows:

(i) With the exception of low-solids coatings, the VOC content of architectural coatings, also referred to as VOC content regulatory, shall be calculated as weight of VOC per volume of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds, according to the following equation:

$$\text{VOC content} = (W_s - W_w - W_{ec}) / (V_m - V_w - V_{ec})$$

Where:

VOC content	=	grams of VOC per liter of coating
$W_s$	=	weight of all 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

(ii) For low-solids coatings, the VOC content, also referred to as VOC actual, shall be calculated as weight of VOC per volume of coating, thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compound:

$$\text{VOC content}_{ls} = (W_s - W_w - W_{ec}) / (V_m)$$

Where:

VOC content <sub>ls</sub>	=	grams of VOC per liter of coating
$W_s$	=	weight of all 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

(iii) The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

(iv) If the manufacturer does not recommend thinning, the VOC content must be calculated for the coating as supplied. If the manufacturer recommends thinning, the VOC content regulatory shall be calculated by including the maximum amount of thinning solvent as recommended by the manufacturer.

(v) The VOC content of a multicomponent coating shall be calculated as mixed or catalyzed.

(vi) If the coating contains silanes, siloxanes or other ingredients that generate ethanol or other VOCs during the curing process, the calculated VOC content must include the VOCs emitted during curing.

(7) Painting Practices

All persons using containers for storing, transferring or otherwise utilizing architectural coatings, thinners, cleanup solvents, or other materials which contain volatile organic compounds shall comply with the requirements of Rule 67.17 – Storage of Materials Containing Volatile Organic Compounds.

(e) **ADMINISTRATIVE REQUIREMENTS**

(1) General Container Labeling Requirements:

Each manufacturer of any architectural coating subject to this rule shall display the information listed in Subsections (e)(1)(i) through (e)(2)(viii) on the coating container (or its label) in which the coating is sold or distributed.

(i) **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 CARB and make it available on request to the Air Pollution Control Officer.

(ii) **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 coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

(iii) **VOC Content:**

VOC content of coatings shall be calculated using equations in Subsection (d)(6), as applicable.

Each coating container subject to this rule shall display one of the following values in grams of VOC per liter of coating:

(A) Maximum VOC content as determined from all potential product formulations; or

(B) VOC content as determined from actual formulation data for this coating; or

(C) VOC content as determined using test methods specified in Subsection (f)(2);

(D) If the manufacturer does not recommend thinning, the container must display the VOC content, as supplied. If the manufacturer recommends

thinning, the container must display the VOC content, including the maximum recommended amount of thinning solvent. This requirement does not apply to the thinning of coatings with water;

(E) For multicomponent coatings the container must display the VOC content as a mixture of all components including catalysts;

(F) If a coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the coating's curing process, the VOC content must include the amount of VOCs emitted during curing.

(2) Additional Container Labeling Requirements for Specified Coatings subject to this rule:

(i) **Faux Finishing Coatings:** The labels of all clear topcoat faux finishing coatings shall prominently display the following statement: "This product can only be sold or used as a part of a Faux Finishing coating system".

(ii) **Industrial Maintenance Coatings:** Each manufacturer of industrial maintenance coatings shall display on the label or lid of the container in which the coating is sold or distributed one or more of the statements listed below:

(A) "For industrial use only."

(B) "For professional use only."

(C) "Not for Residential Use" or "Not Intended For Residential Use."

(iii) **Nonflat-High Gloss Coatings:** The labels of nonflat-high gloss coatings shall prominently display the words "High Gloss."

(iv) **Rust Preventative Coatings:** The labels of rust preventative coatings shall prominently display the statement "For Metal Substrates Only."

(v) **Reactive Penetrating Sealers:** The labels of reactive penetrating sealers shall prominently display the statement "Reactive Penetrating Sealer".

(vi) **Stone Consolidants:** The labels of Stone Consolidants shall prominently display the statement "Stone Consolidant – For Professional Use Only".

(vii) **Wood Coatings:** The labels of Wood Coatings shall prominently display the statement "For Wood Substrates Only".

(viii) **Zinc-Rich Primers:** The labels of Zinc Rich Primers shall prominently display one or more of the statements listed below:

(A) "For industrial use only."

(B) "For professional use only."

(C) "Not for Residential Use" or "Not Intended For Residential Use."

**(f) REPORTING AND TESTING REQUIREMENTS**

**(1) Sales Data**

A responsible official from each coating manufacturer shall upon request of the Executive Officer of CARB, or his/her delegate, provide data concerning the distribution and sales of architectural coatings. The responsible official shall within 180 days provide the following information, including but not limited to:

- (i) The name and mailing address of the manufacturer;
- (ii) The name, mailing address and telephone number of a contact person;
- (iii) The name of a coating product as it appears on the label and the applicable coating category;
- (iv) Whether the product is marketed for interior or exterior use or both;
- (v) The number of gallons of coatings sold in California in containers with a volume greater than one liter (1.057 quart) and in containers with a volume equal or smaller than one liter (1.057 quart);
- (vi) The VOC content of coatings, both actual and regulatory, in grams per liter.  
  
If thinning is recommended, list the VOC actual and regulatory content calculated using maximum recommended thinning. For a multicomponent coating, list the VOC content as mixed or catalyzed. If coating containers with a volume greater than one liter and those with a volume equal to or less than one liter have a different VOC content, list them separately;
- (vii) The names and Chemical Abstract Service (CAS) numbers of the VOC constituents in the coating;
- (viii) The names and CAS numbers of exempt compounds, as listed in District Rule 2;
- (ix) Whether the product is marketed as containing 100% solids, or as solvent borne or waterborne;
- (x) Description of resins or binders in the coating;



- (xi) Whether the coating is single-component or multi-component;
- (xii) The density of the coating in pounds per gallon;
- (xiii) Weight percent of solids, all volatile materials, water and any exempt compounds, as applicable;
- (xiv) Volume percent of solids, water and exempt compounds, as applicable.

All sales data listed in Subsection (f)(1) shall be maintained by a responsible official for a minimum of three years. Sales data submitted by the responsible official to the Executive Officer of CARB may be claimed as confidential and such information shall be handled in accordance to the procedures specified in Title 17, California Code of Regulations, Sections 91000 through 91022.

(2) **Test Procedures**

The procedures and test methods listed below shall be used to demonstrate compliance with this rule.

(i) **VOC Content of Coatings:**

Laboratory determination of the VOC content of coatings, with the exception of methacrylate multicomponent coatings, shall be conducted by the EPA Test Method 24, incorporated by reference in Subsection (f)(2)(ii)(A). To determine the physical properties of a coating the standard test methods incorporated by reference in the EPA Test Method 24 shall be used.

As an alternative, SCAQMD Method 304-91 (1996), incorporated by reference in Subsection (f)(2)(ii)(B) may be used.

The exempt compounds content shall be determined by SCAQMD Method 303-91 (revised in 1996) and incorporated by reference in Subsection (f)(2)(ii)(C), or BAAQMD Method 43 (revised in 2005) or BAAQMD Method 41 (revised in 2005), incorporated by reference in Subsections (f)(2)(ii)(D) and (E), correspondingly.

To calculate the VOC content of a coating, the manufacturer may also use 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 Test Method 24 and any other means for determining VOC content, the Test Method 24 results will govern, except when an alternative method is approved as specified in Subsection (f)(2)(iii). The Air Pollution Control Officer may also require the manufacturer to conduct analysis according to EPA Test Method 24.

(ii) **Incorporated Test Methods:** The following test methods are incorporated by reference herein, and shall be used to test coatings subject to

provisions of this rule. The most recent version of the ASTM incorporated test methods may be used instead of those specified below.

(A) VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Test Method 24 as it exists in Appendix A of 40 Code of Federal Regulations (CFR) Part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings".

(B) Alternative Test for VOC Content of Coatings: Alternatively, the VOC content of coatings may be determined by SCAQMD Method 304-91 (1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials", SCAQMD "Laboratory Methods of Analysis for Enforcement Samples".

(C) Exempt Compounds: The content of compounds exempt under EPA Test Method 24 shall be analyzed by SCAQMD Method 303-91 (1996), "Determination of Exempt Compounds", SCAQMD "Laboratory Methods of Analysis for Enforcement Samples".

(D) Exempt compounds – Siloxanes: Cyclic, branched, or linear completely methylated siloxanes shall be analyzed by BAAQMD Test Method 43, "Determination of Volatile Methylsiloxanes in Solvent-based Coatings, Inks, and Related Materials", BAAQMD Manual of Procedures, Volume III, adopted 05/18/2005.

(E) Exempt Compounds – Parachlorobenzotrifluoride (PCBTF): PCBTF shall be analyzed by BAAQMD Test Method 41, "Determination of Volatile Organic Compounds in Solvent-based Coatings and Related Materials Containing Parachlorobenzotrifluoride", BAAQMD Manual of Procedures, Volume III, adopted 05/18/2005.

(F) Acid Content of Coatings: See Subsection (c)(42).  
The acid content of Pretreatment Wash Primer shall be determined by ASTM D1613-06(2012), "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products".

(G) Aluminum Roof Coatings: See Subsection (c)(3).  
Aluminum pigment content shall be determined in accordance with SCAQMD Test Method 318-95 (1996), "Determination of Weight Percent Elemental Metal in Coatings by X-ray Diffraction", SCAQMD "Laboratory Methods of Analysis for Enforcement Samples".

(H) Basement Specialty Coatings: See Subsection (c)(7).  
Hydrostatic Pressure Resistance of Basement Specialty Coatings shall be determined by ASTM D7088-08, "Standard Practice for Resistance to

Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry”.

Mold and Mildew Growth Resistance of Basement Specialty Coatings shall be determined by ASTM D3273-12, “Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber”, and ASTM D3274-09(2013), “Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (fungal or algal) Growth, or Soil and Dirt Accumulation”.

(I) Fire Resistance Rating: See Subsection (c)(21).  
The fire resistance rating of fire-resistive coatings shall be determined by ASTM E119-14, “Standard Test Methods for Fire Tests of Building Construction and Materials”.

(J) Gloss Determination: See Subsections (c)(22), (c)(36), and (c)(37).  
The gloss of flat, nonflat and nonflat-high gloss coatings shall be determined by ASTM D523-14, “Standard Test Method for Specular Gloss”.

(K) Metal Content of Coatings: See Subsections (c)(20) and (c)(34).  
The metal content of a coating shall be determined by SCAQMD Test Method 318-95 (1996), “Determination of Weight Percent Elemental Metal in Coatings by X-ray Diffraction”, SCAQMD “Laboratory Methods of Analysis for Enforcement Samples”.

(L) Methacrylate Multicomponent Coatings: See Subsection (c)(59).  
The VOC content of Methacrylate Multicomponent Coatings used as traffic marking coatings shall be analyzed by the procedures described in 40 CFR Part 59, Subpart D, Appendix A, “Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coating”.

Please note that this method has not been approved for Methacrylate Multicomponent Coatings used for purposes other than traffic marking coatings or for other classes of multicomponent coatings.

(M) Reactive Penetrating Sealer: See Subsection (c)(44).  
The water repellency of Reactive Penetrating Sealers shall be determined by ASTM C67-14, “Standard Test Method for Sampling and Testing Brick and Structural Clay Tile”; or ASTM C97/C97M-09, “Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone”; or ASTM C140/C140M-14b “Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units”.

The water vapor transmission of Reactive Penetrating Sealers shall be determined by ASTM E96/E96M-14, “Standard Test Methods for Water Vapor Transmission of Materials”.

The chloride screening for Reactive Penetrating Sealers shall be determined using the National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures".

(N) Stone Consolidants: See Subsection (c)(56).  
Selection and use of Stone Consolidants shall be determined by ASTM E2167-01(2008), "Standard Guide for Selection and Use of Stone Consolidants".

(O) Tub and Tile Refinish Coating: See Subsection (c)(60).  
The scratch hardness of Tub and Tile Refinish Coatings shall be measured by ASTM D3363-05(2011)e2, "Standard Test Method for Film Hardness by Pencil Test".

The abrasion resistance of Tub and Tile Refinish Coatings shall be determined by ASTM D4060-14, "Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser".

The adhesion of Tub and Tile Refinish Coatings shall be determined by ASTM D4585/D4585M-13, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-09e2, "Standard Test Methods for Measuring Adhesion by Tape Test".

The water resistance of Tub and Tile Refinish Coatings shall be determined by ASTM D4585/D4585M-13, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation", and ASTM D714-02(2009), "Standard Test Methods for Evaluating Degree of Blistering of Paints".

(P) Waterproofing Membranes: See Subsection (c)(67).  
The properties of waterproofing membranes shall be determined by ASTM C836/C836M-12, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course".

**(iii) Alternative Test Methods:**

Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Subsection (f)(2) after review and approval in writing by the District, CARB, and EPA, may also be used.

**(g) COMPLIANCE SCHEDULE**

(1) All persons subject to this rule shall be in compliance with all the rule's provisions by January 1, 2016.

(2) Prior to January 1, 2016, any coating that meets all the requirements of this rule shall be exempt from the current Rule 67.0 (effective 12/12/01).

2. Existing Rule 67.0 is to be repealed in its entirety.

**IT IS FURTHER RESOLVED AND ORDERED** that proposed new Rule 67.0.1 of Regulation IV shall take effect January 1, 2016.

**IT IS FURTHER RESOLVED AND ORDERED** that the repeal of Rule 67.0 of Regulation IV shall take effect January 1, 2016.

**PASSED AND ADOPTED** by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this \_\_\_\_ day of \_\_\_\_\_, 2015, by the following vote:

APPROVED AS TO FORM AND LEGALITY  
COUNTY COUNSEL

BY: \_\_\_\_\_  
SENIOR DEPUTY

The foregoing Resolution was passed and adopted by the Air Pollution Control District, County of San Diego, State of California, on this 24<sup>th</sup> day of June, 2015, by the following vote:

AYES: Cox, Jacob, D. Roberts, R. Roberts, Horn

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STATE OF CALIFORNIA)  
County of San Diego)<sup>SS</sup>

I hereby certify that the foregoing is a full, true and correct copy of the Original Resolution entered in the Minutes of the San Diego County Air Pollution Control Board.

DAVID HALL  
Clerk of the Air Pollution Control Board

By: Diana Lopez  
Diana Lopez, Deputy



Resolution No. 15-088  
06/24/15 (AP2)

## Socioeconomic Impact Assessment

### I. INTRODUCTION

Pursuant to California law, the primary authority for controlling Volatile Organic Compounds (VOCs) emissions from architectural coatings, resulting from coatings manufacture and use, belongs to local air pollution control or air quality management districts. Historically, however, the California Air Resources Board (CARB) provided guidance and other assistance to the districts, including the development of model rules or Suggested Control Measures to reduce air contaminants, such as VOCs, that are ozone precursors. This practice is very important for regulating emissions from architectural coatings because the manufacture and use of such coatings are not confined to one area or a few areas of the state of California, but these activities are occurring almost daily throughout the whole state.

Current District Rule 67.0 (last revised in 2001) controls VOC emissions from manufacture, sale and use of architectural coatings that include a variety of residential, commercial and industrial paints, stains, varnishes, and other coatings. This rule followed the guidance of CARB SCM for Architectural Coatings issued in 2000. In 2005, CARB conducted a survey of architectural coatings available in California during 2004. The survey goal was to collect information on the latest nomenclature of architectural coatings manufactured, sold, and used in the state, their composition and quantities. From this data, CARB estimated the amount of VOC emissions occurring as a result of the manufacture and use of architectural coatings. The survey showed that in spite of the increase in California's population and the volume of architectural coatings sold, the total VOC emissions from this coating category have decreased. Nevertheless, many parts of the state have still not attained the federal or state air quality standards for ozone and some additional measures were required to further improve the air quality in California.

Subsequently in 2007, CARB issued a new SCM, which has more stringent emission limits and other requirements than presently existed. The SCM's lower VOC content limits and other new requirements for architectural coatings are based on the data obtained from the CARB survey conducted in 2005. The SCM Technical Support Document also included information on the availability of low VOC content coatings, especially waterborne coatings.

It should be noted that CARB indicated that the SCM is intended for all California air pollution control districts, excluding the South Coast Air Quality Management District (SCAQMD). While the SCM is similar to SCAQMD Rule 1113 (Architectural Coatings) as it existed in 2007, some emission limits in the SCM are not as stringent. This was done because some parts of California, especially its Northern part, have weather conditions significantly different from a dry warm climate of the South Coast region. Therefore, the SCM and all the information in the Technical Support Document do not apply to four counties regulated by the SCAQMD rule.

Following the adoption of the SCM by the CARB Governing Board, the CARB Executive Officer's letter to California air pollution control agencies "strongly encouraged local districts to adopt the SCM without modifications, except for reformatting it, if necessary."<sup>1</sup> Therefore, proposed new Rule 67.0.1 is very similar to the 2007 CARB SCM and includes the same coating nomenclature, definitions, VOC emission limits, and other requirements.

## II. STATUTORY REQUIREMENTS

California law requires air pollution control districts to perform a socioeconomic impact assessment (SIA) when adopting, amending, or repealing rules and regulations that will significantly affect air quality and emission limitations.

Health and Safety (H&S) Code Section 40728.5, Subdivision (b), specifies the following elements to be included in the SIA:

1. The type of industry or business, including small business, affected by the rule or regulation.
2. The impact of the rule or regulation on employment and the economy of the region affected by the adoption of the rule or regulation.
3. The range of probable costs to industry or business, including small business, of the rule or regulation.
4. The availability and cost-effectiveness of alternatives to the rule or regulation.
5. The emission reduction potential of the rule or regulation.
6. The necessity of adopting, amending, or repealing the rule or regulation in order to attain state and federal ambient air quality standards.

Pursuant to H&S Code Section 40728.5(e), the analyses specified in 2. and 4. above are not required if the proposed rule is substantially similar to or required by a state or federal law, regulation, or formal guidance document, including federal Control Techniques Guidelines (CTGs). The District considers the CARB SCM to be a formal guidance document and accordingly, proposed new Rule 67.0.1 is very similar to the CARB SCM in terms of coating definitions, emission standards, and administrative, reporting, and testing requirements. Therefore, based on the H&S Code stipulation, the SIA below does not address either the availability or cost-effectiveness of the alternatives to proposed new Rule 67.0.1, or its impact on the employment and the economy of San Diego County. These issues have been discussed in the SCM Technical Support Document<sup>2</sup> issued by CARB.

In addition, the Technical Support Document contains a thorough analysis evaluating possible economic impacts on coating manufacturers, distributors, retailers, and users. In 2007, CARB distributed an Economic Impacts Survey to all known manufacturers of architectural coatings (147 companies) who would be impacted by the proposed SCM. The survey's goal was to evaluate approximate costs of complying with the lower VOC content limits of architectural coatings and other requirements to be proposed in the new SCM. CARB received 36 responses that included small, medium and large paint manufacturing companies.



The survey results showed that 12 companies would not be impacted by the proposed SCM because they have already reformulated their coatings to comply with the more stringent VOC content limits of the SCAQMD. The rest of the companies did not consider the additional expenses to comply with the SCM requirements to be significant.

### **III. NECESSITY OF ADOPTING NEW RULE 67.0.1**

San Diego County Air Basin does not attain the national and state ambient air quality standards for ozone. Both federal and state laws require the District to implement rules that control emissions of ozone precursors – VOCs and oxides of nitrogen. Current Air Pollution Control District (District) Rule 67.0, based on the 2000 CARB SCM for Architectural Coatings, was adopted by the District in 2001 and is now seriously outdated. In 2007, CARB issued a new SCM that was based on the latest achievements in low VOC content coating technology.

Adopting proposed new Rule 67.0.1 that reflects the 2007 CARB SCM will provide the District with the opportunity to further control VOC emissions from architectural coatings and obtain sizeable VOC emission reductions. This action will also result in improvement in air quality in San Diego County and expedite the attainment of the national and state ambient air quality standards for ozone.

### **IV. THE TYPE OF INDUSTRY AND BUSINESS, INCLUDING SMALL BUSINESS, AFFECTED BY THE PROPOSED RULE**

Proposed new Rule 67.0.1 would potentially impact industries engaged in manufacturing paints, varnishes, enamels and allied products (NAICS 325510); end users of architectural coatings including do-it-yourself consumers and painting contractors that may be small businesses, and maintenance personnel (NAICS 238320); wholesale sellers of paints, varnishes, and supplies (NAICS 424950); and paint stores (NAICS 444120). In addition, the rule may impact new construction and maintenance of buildings both industrial and non-industrial, transportation infrastructure, industrial structures such as aboveground fuel tanks, etc.

### **V. THE RANGE OF PROBABLE COSTS OF THE PROPOSED RULE AND ITS IMPACT ON INDUSTRY OR BUSINESS, INCLUDING SMALL BUSINESS**

State law requires local air pollution control districts to conduct an SIA before adopting a rule that will significantly affect air quality or emission limitations. Proposed new Rule 67.0.1 contains new, more stringent VOC emission limits and other new requirements for the manufacturing and use of architectural coatings. While the SCM is not a state regulation, the CARB urged the air districts<sup>1</sup> to adopt the SCM without significant changes, so the rules for architectural coatings that are widely used across the state will have the same VOC emission limitations and other requirements. Therefore, this SIA is using the CARB Economic Analysis of the SCM<sup>2</sup> as a guidance document in order to assess the impact of proposed new Rule 67.0.1 on the economy and employment of San Diego County.

The most significant feature of the 2007 SCM is the reduced VOC content limits for many coatings, in both general and specialty categories. These requirements may affect both paint

manufacturers that will have to reformulate the coatings and consumers such as paint suppliers, sellers, painting contractors and individuals that will have to pay higher prices for coatings.

In order to evaluate the economic impact of the SCM, CARB considered two possible scenarios. In one scenario, it was assumed that all the costs of paint reformulation were fully absorbed by the paint manufacturing industry without negatively affecting consumer prices. Subsequently, CARB conducted a survey that included 147 coating manufacturing companies operating in or out of the state of California. The selection of survey participants was based on each company's sales revenue and the quantity of coatings produced, and both either complying or not complying with the proposed VOC content limits. A total of 36 companies, including small, medium, and large manufacturers, responded to the survey. CARB then estimated the SCM impact on the profitability of these companies by analyzing how the cost of compliance would affect their return on equity (ROE). ROE is defined as the amount of net income returned as a percentage of shareholders equity (i.e., it measures a corporation's profitability).

For each group of businesses, CARB estimated the cost of compliance with the SCM, including the cost of federal and state taxes. These costs have been included in the overall cost of coatings manufacture for companies of several sizes (i.e., large, medium, and small). The new value of the ROE based on the three-year average was calculated and compared with the original ROE for each business size. The results of this analysis showed that ROE reductions ranged from negligible to a decline of 1% for large businesses and 4.7% for small paint manufacturers. A decrease of 10% (value used consistently by CARB since 1990) in ROE is considered by ARB to be a sign of a significant economic impact. Therefore, CARB concluded that there will be no significant impact of the proposed SCM on coating manufacturing companies.

There is only one paint manufacturing business in San Diego County and it is not classified as a small business. According to the company's website, it produces about 12,000 gallons of paints per year, including architectural coatings. The recent information from the company shows that about 80% of architectural coatings presently produced are water-based paints that are in compliance with the VOC content limits of proposed new Rule 67.0.1. The rest of the paints are solvent based that either comply with the rule requirements or are not classified as architectural coatings. Therefore, there will be no economic impact of the proposed rule on the paint manufacturing industry in San Diego County. Obviously, the majority of coatings used in the county are manufactured either in other parts of California or outside of the state. Thus, the evaluation of possible economic impacts on the paint manufacturing industry as a result of the SCM requirements conducted by CARB will also be applicable to San Diego County.

The other possible scenario considered by CARB assumed that all costs of coatings reformulation to achieve the lower VOC content are passed on through increased coating prices to consumers such as painting contractors, retailers or individual users of coatings. Based on this assumption, CARB estimated the cost increases for all reformulated paint categories to be between a net savings and a cost of \$6.82 per gallon at the point of manufacture, with an average cost increase by approximately 30 cents per gallon of paint. Taking into consideration the subsequent increases on the wholesale and retail levels, the average price increase was estimated to be around 6%, or \$1.21 per gallon of paint. CARB also noted that the largest price increases

may occur in industrial maintenance and other commercial coating applications, with the maximum increase in consumer price of up to 47%.

For coatings most often used by individuals such as flat, non-flat coatings, primers, sealers and undercoaters, the cost increase as a result of paint reformulation will be approximately \$1.65 per gallon of paint (i.e., an increase of approximately 9%). However, even in 2007, at the time of the SCM adoption, there were a variety of architectural coatings complying with the SCM requirements. These coatings also comply with proposed new Rule 67.0.1.

In addition, the majority of air districts in the state have already successfully implemented the SCM, and there is no reason to believe that the impact of the proposed rule on individual consumers or commercial establishments that use architectural coatings in San Diego County would be significant.

While there are no small paint manufacturing businesses in San Diego County, some small establishments, paint distributors, and retail stores can be classified as small businesses. However, considering that the prices for the majority of architectural coatings that comply with the lower VOC content limits did not increase significantly, these businesses should not be negatively affected by proposed new Rule 67.0.1.

## **VI. THE EMISSION REDUCTION POTENTIAL AND COST-EFFECTIVENESS OF THE PROPOSED RULE**

The VOC emission reductions and cost-effectiveness of proposed new Rule 67.0.1 were determined using the information provided in the Technical Support Document for 2007 CARB SCM<sup>2</sup>.

As previously noted, the VOC emissions in the state of California (excluding SCAQMD) from the manufacture and use of architectural coatings were calculated by CARB, based on the results of the 2005 Architectural Coating Survey. The data obtained represented the amount of coatings and their VOC content sold and used during the 2004 calendar year. The calculated VOC emissions from the data were reported to be 47.4 tons/day<sup>2</sup>.

The estimated VOC emissions and emission reductions as a result of the implementation of CARB SCM in San Diego County were determined by apportioning the total VOC emissions for the state of California to individual air districts and according to each district's population. It was also assumed that the population distribution by Air Pollution Control districts in California did not significantly change in the last ten years.

According to the 2010 census, California's population was about 37.2 million. The population of the South Coast air district, which includes four counties, was 15.2 million. The population of San Diego County in 2010 was 3.1 million or 15.4% of the state population, excluding SCAQMD.

The estimated VOC emissions from architectural coatings in San Diego County are:

$$47.4 \text{ tons/day} \times 0.154 = 7.3 \text{ tons/day}$$

The statewide VOC emission reductions as a result of the SCM implementation will be approximately 32%, according to CARB. Accordingly, the projected VOC emission reductions as a result of implementing new Rule 67.0.1 in San Diego County will be:

$$7.3 \text{ tons/day} \times 0.32 = 2.3 \text{ tons/day or } 840 \text{ tons/year}$$

CARB also determined the individual cost-effectiveness of the proposed new lower VOC content limits for each coating category of the SCM and the cost increase per gallon of each coating for consumers, based on raw material costs (not on actual retail prices). The average calculated cost-effectiveness of the SCM was \$1.12 per pound of VOC reduced. It is significantly below the District's average cost-effectiveness for rules controlling VOC emissions of \$6 per pound of VOC reduced.

The average cost increase for consumers as a result of implementation of the SCM calculated by CARB is approximately \$1.21 per gallon of coatings, which is not very significant. The larger price increases may occur in industrial maintenance and other coatings used mostly by professional contractors.

## **VII. CONCLUSION**

Proposed new Rule 67.0.1 will not negatively impact affected paint manufacturing industry or the variety of businesses distributing or selling architectural coatings. The rule will not significantly affect individual consumers of new low VOC content coatings due to their wide availability and comparable prices.

The proposed new rule will provide sizeable air quality benefits by reducing emissions of VOCs that are precursors of ground level ozone, a major component of photochemical smog.

## **References**

1. Letter from James N. Goldstone, CARB Executive Officer, to Air Pollution Control Districts, February 1, 2008.
2. Technical Support Document, Suggested Control Measure for Architectural Coatings, California Air Resources Board, 2007.

## COMPARATIVE ANALYSIS

### PROPOSED NEW RULE 67.0.1 – ARCHITECTURAL COATINGS

#### Statutory Requirements

Prior to adopting, amending, or repealing a rule or regulation, California Health and Safety Code Section 40727 requires findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined therein. As part of the consistency finding and to ensure proposed rule requirements do not conflict with or contradict other Air Pollution Control District (District) or federal regulations, Health and Safety Code Section 40727.2(a) requires the District to perform a written analysis identifying and comparing the air pollution control standards and other provisions of proposed new Rule 67.0.1 with existing or proposed District rules and guidelines and existing federal rules, requirements, and guidelines applying to the same source category.

#### Analysis

Proposed new Rule 67.0.1 applies to manufacturers, suppliers, distributors, sellers and users of architectural coatings. The rule is based on the California Air Resources Board (CARB) 2007 Suggested Control Measure (SCM) for Architectural Coatings and has the same definitions, volatile organic compound (VOC) content limits, and other requirements of the SCM.

#### Comparison with existing District rules and regulations

There are no existing District source specific or other rules that contradict with proposed new Rule 67.0.1. Architectural coating operations are exempt from permitting requirements and therefore are not subject to the Best Available Control Technology (BACT) requirements of New Source Review.

#### Comparison with EPA National Architectural Coating Rule

National Volatile Organic Compound Emission Standards for Architectural Coatings (National Rule) was promulgated by the EPA and first published in the Federal Register in September 1998. The most significant difference between the National Rule and the new proposed Rule 67.0.1 is the applicability and VOC content limits of coatings.

The National Rule applies only to manufacturers and importers of architectural coatings as allowed by Section 183(e) of the Federal Clean Air Act. Rule 67.0.1 also applies to distributors, retailers and end users of coatings.

The VOC content limits for the majority of coatings are significantly less stringent in the National Rule than in Rule 67.0.1. For example, in the National Rule, the VOC content limits for the most common coatings – flat, non-flat and industrial maintenance coatings – are respectively 250, 380, and 450 g/liter, less water and exempt compounds. In proposed Rule 67.0.1 these limits are significantly more stringent – 50, 100 and 250 g/liter, less water and exempt compounds, respectively.

Furthermore, the National Rule has 30 additional coating categories that are not included in the SCM, and consequently are not present in proposed Rule 67.0.1. CARB has analyzed these categories and concluded that it was not necessary to incorporate them into the SCM. These coatings may be substituted by other coatings with lower VOC content that have similar properties to ensure the satisfactory quality of the painted surface.

## INCREMENTAL COST-EFFECTIVENESS ANALYSIS

### PROPOSED NEW RULE 67.0.1 – ARCHITECTURAL COATINGS

Health and Safety Code Section 40920.6 (a) requires air pollution control districts to identify one or more potential control options that achieve at least the same benefit as the proposed rule, assess the cost-effectiveness of those options and calculate the incremental cost-effectiveness of each identified option. Incremental cost-effectiveness is defined as the difference in control costs divided by the difference in emission reductions between two potential options achieving the same emission reduction goal.

The only potential option that achieves at least the same or better environmental benefits from the manufacturing and application of architectural coatings would be to adopt the lower volatile organic compound (VOC) emission limits of Rule 1113 (Architectural Coatings) of the South Coast Air Quality Management District (SCAQMD).

It should be noticed that many VOC content limits in the California Air Resources Board Suggested Control Measure (SCM) for Architectural Coatings (and correspondingly in proposed Rule 67.0.1) are similar to those in SCAQMD Rule 1113 adopted in 2007. Therefore, for the purpose of conducting the incremental analysis for Rule 67.0.1, the Air Pollution Control District used the cost effectiveness, emission reductions and control costs of Rule 1113 as it existed in 2007.

Table 1. SDAPCD Rule 67.0.1 - Proposed

Baseline VOC Emission Inventory	7.3 tons/day
VOC Emission Reductions	2.3 tons/day = 1,679,000 pounds per year
Cost-Effectiveness	\$1.12/per pound VOC reduced (same as SCM)
Annualized Cost for proposed Rule 67.0.1	\$1,880,480 per year

Table 2. SCAQMD Rule 1113 - 2007

VOC Emission Reductions	4.7 tons/day = 3,431,000 pounds per year
Cost-Effectiveness	\$8.18 per pound VOC reduced
Annualized cost	\$28,292,493 per year

Table 3. Incremental Cost-Effectiveness

Incremental Annualized Cost	$\$28,292,493 - \$1,880,480 = \$26,412,013$ per year
Incremental Annual Emission Reductions	$3,431,000 - 1,679,000 = 1,752,000$ pounds per year
Incremental Cost-Effectiveness	\$15 per pound VOC reduced

As shown in Table 3, the incremental cost-effectiveness of achieving higher emission reductions is \$15 per pound of VOC reduced. This means that each extra pound of VOC emissions that would be reduced by adopting more stringent limits of the SCAQMD rule would cost \$15 in San Diego County. Therefore, this potential option is not feasible.



**AIR POLLUTION CONTROL DISTRICT  
COUNTY OF SAN DIEGO**

**ADOPTION OF NEW RULE 67.0.1 – ARCHITECTURAL COATINGS AND  
REPEAL OF EXISTING RULE 67.0 – ARCHITECTURAL COATINGS**

**WORKSHOP REPORT**

A notice for a workshop was mailed to all known manufacturers, distributors, and retailers of architectural coatings sold or used in San Diego County. Notices were also mailed to all Economic Development Corporations and Chambers of Commerce in San Diego County, the U.S Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and other interested parties.

The workshop was held on October 29, 2013. Written comments were received before and after the workshop from affected parties, CARB and EPA. A number of oral comments were also received from workshop participants.

The comments and the Air Pollution Control District (District) responses are as follows:

**1. WRITTEN COMMENT**

The proposed volatile organic compound (VOC) content limits for Non-Bituminous and Bituminous Roof coatings are very low. Would complying coatings of good quality be available for the roofing contractors?

**DISTRICT RESPONSE**

Yes. According to a CARB 2005 survey, a large majority of Non-Bituminous and Bituminous Roof coatings sold in California are waterborne with a VOC content of 50 grams/liter or less. These coatings are therefore in compliance with the VOC content limits of proposed Rule 67.0.1.

**2. WRITTEN COMMENT**

The sell-through period in the proposed Rule 67.0.1 should be increased from one year to three years, to be consistent with CARB's 2007 Suggested Control Measure for Architectural Coatings (SCM). Although many coatings complying with the requirements of the proposed rule are available, some coatings currently in use in San Diego County may have higher VOC content limits in compliance with current Rule 67.0. A shorter one year sell-through period could force many suppliers and retailers to dispose of usable products that in turn may contribute to water and air pollution.

**DISTRICT RESPONSE**

The District agrees. The proposed sell-through period for existing coatings (manufactured before the effective date of the proposed rule) has been extended to three years, consistent with the SCM.

**3. WRITTEN COMMENT**

The District should not repeal existing Rule 67.0, in order to maintain continuity and clarity in proposed Rule 67.0.1.

**DISTRICT RESPONSE**

Rule 67.0 is proposed for repeal upon the effective date of Rule 67.0.1. However, Subsection (d)(4), Sell-through of Coatings, has been modified to incorporate Rule 67.0 by reference to apply to coatings manufactured prior to the effective date of Rule 67.0.1.

**4. WRITTEN COMMENT**

To assist the regulated community in understanding which categories of coatings are eliminated, the District should include transitional language in the amended rule indicating which coating categories are being deleted and which are added.

**DISTRICT RESPONSE**

The District will include the requested information in a Compliance Advisory that will be distributed to the regulated community in advance of proposed Rule 67.0.1's effective date. Please also see the District's response to Comment 16.

**5. WRITTEN COMMENT**

The District should include Dimethyl Carbonate in the list of Exempt Compounds that are not classified as VOCs.

**DISTRICT RESPONSE**

Dimethyl Carbonate is included in the list of exempt compounds in the District's existing Rule 2 (Definitions), Table 1, page 10.

**6. WRITTEN COMMENT**

The proposed rule should list Tertiary Butyl Acetate (TBAC) as an exempt compound. TBAC is exempt in 49 states, Canada and the majority of California air districts, including the South Coast Air Quality Management District (SCAQMD).

**DISTRICT RESPONSE**

CARB has not exempted TBAC from its statewide VOC regulations due to apparent uncertainty in the possible health impacts resulting from exposure to TBAC, as reported by the California Office of Environmental Health Hazard Assessment (OEHHA). SCAQMD's exemption of TBAC is limited to industrial maintenance coatings only, since these coatings are typically applied by professional painting contractors who use personal protective equipment.

The District does not have the resources to make a definitive determination regarding any health impacts resulting from exposure to TBAC, nor to enforce a requirement on professional painting contractors to use personal protective equipment. Therefore, the District is not proposing to list TBAC as an exempt compound in coating formulations at this time. The District will reconsider its position on TBAC at such time OEHHA further evaluates the possible toxicity of TBAC and its metabolites or CARB exempts TBAC from statewide VOC regulations.

**7. WRITTEN COMMENT**

Presently, many manufacturers have architectural coatings that satisfy all the requirements of the SCM, and correspondingly, proposed new Rule 67.0.1. However, during the first 12 months after the new rule adoption, current Rule 67.0 will be in effect. Therefore, Rule 67.0.1 should include an early compliance provision to allow manufacturers to sell coatings that comply with Rule 67.0.1 prior its effective date.

**DISTRICT RESPONSE**

The District agrees. Accordingly, an early compliance provision has been added to the Compliance Schedule, Section (g), of the proposed rule.

**8. WRITTEN COMMENT**

Proposed Rule 67.0.1 should include transitional labeling requirements for some coatings, such as clear brushing lacquers and quick dry enamels.

**DISTRICT RESPONSE**

The labeling requirements in proposed Rule 67.0.1 are consistent with the SCM.

**9. WRITTEN COMMENT**

Rule 67.0 requires Industrial Maintenance coatings to have labels with four statements. The labels for Industrial Maintenance Coatings and Zinc Rich Primers, in addition to “For industrial use only” and “For professional use only”, should also include phrases “Not for residential use” or “Not intended for residential use” as it was stated in the current rule.

Changing labels is very expensive. To reduce regulatory burden for those coating manufacturers that have existing labels with four statements, it is recommended that Rule 67.0.1 include this requirement for Industrial Maintenance Coatings and Zinc-Rich Primers.

**DISTRICT RESPONSE**

The labeling requirements in proposed Rule 67.0.1 are consistent with the SCM for both Industrial Maintenance Coatings and Zinc-Rich Primers. The same labels are also required in architectural coating rules of other California air districts, such as Bay Area Air Quality Management District .

**10. WRITTEN COMMENT**

The definition of Rust Preventative Coatings should be revised to be consistent with the SCM.

**DISTRICT RESPONSE**

The District agrees. The proposed definition in Subsection (c)(48) has been revised accordingly.

**11. WRITTEN COMMENT**

Rule 67.0.1 should include additional test methods for determining the VOC content of architectural coatings, such as SCAQMD Test Method 313-91 or ASTM Test Method D6886.

**DISTRICT RESPONSE**

The District has consulted with SCAQMD staff regarding Test Method 313-91. The District was informed that while this test is recommended for the testing of coatings with VOC content less than 150 g/liter, recent data show that it has some technical problems, which are presently being investigated. For coatings containing less than 5% of VOC, the ASTM Test Method D6886-12 may be used pursuant to Subsection (f)(2)(iii).

**12. WRITTEN COMMENT**

One of the requirements in the proposed definition of Reactive Penetrating Sealers in Rule 67.0.1 is that the water transmission rate after application of the sealer on concrete or masonry should not be reduced by more than 2%. A laboratory evaluation of available products in this category complying with the VOC content limit of the SCM showed that this requirement is not realistic.

It is recommended that, in agreement with the experimental data, this requirement will state that after the application of a Reactive Penetrating Sealer on concrete or masonry, the water vapor transmission rate should not decrease by more than 60%.

**DISTRICT RESPONSE**

The referenced report has been provided to the District by the commenter and includes experimental data with measurements of water transmission rates before and after applying samples of Reactive Penetrating Sealers on concrete. The data indicate that the water transmission rates for all samples that otherwise comply with the SCM were reduced by not less than 60%.

The data in this report are currently being evaluated by CARB and the SCAQMD. In the absence of a definite recommendation from these agencies, the District is unable to make any related changes in proposed Rule 67.0.1 at this time.

**13. WORKSHOP COMMENT**

On page two of the proposed rule, architectural coatings are defined as coatings used for stationary structures. However, consider a case when a part of a stationary structure is disconnected from it (such as a metal part attached to this structure). The part will be painted separately near the original structure. Can the coatings complying with Rule 67.0.1 still be used on this part?

**DISTRICT RESPONSE**

Yes, provided that this painting is conducted in proximity to the stationary structure. If the part is taken to a different location specifically designated for painting or is moved to a spray booth, then this will be considered a separate coating operation and the appropriate District rule would apply. For example, if the volume of paint to be used for a metal part (in a separate coating operation) is larger than 20 gallons, then Rule 67.3 (Metal Parts and Products Coating Operations) VOC content limits and other provisions will apply.

**14. WORKSHOP COMMENT**

The definition of an architectural coating states that coatings applied on non-stationary structures or in off-site shops are not architectural coatings. What kind of coatings are they?

**DISTRICT RESPONSE**

These coatings are formulated for application to specific substrates such as metals, wood or plastics and are subject to separate District rules. These coatings may be applied in shops or paint booths. In addition, some special coatings are formulated to meet specific industry requirements such as paints for automobiles, airplanes, space vehicles, ships, etc. All these coatings are also applied in specially equipped booths or other specialized separate locations.

**15. WORKSHOP COMMENT**

The workshop notice states that proposed Rule 67.0.1 will be presented to the District Board in early 2014 and take effect one year after the date of adoption. This means that the new rule will go into effect in mid-2015. Is it possible to move the implementation date of the new rule to the beginning of calendar year 2016? Coating manufacturing companies normally prepare their production plans according to calendar years.

**DISTRICT RESPONSE**

It is now expected that proposed Rule 67.0.1 will be presented to the District Board in late 2014 to allow adequate time to prepare the required supplementary information (including socioeconomic impact report and environmental statement). The proposed effective date has been updated to January 1, 2016, as requested. The proposed rule, if adopted, will take effect on that day barring any unforeseen circumstances. This roughly corresponds to a one-year grace period, which is consistent with the original proposal.

**16. WORKSHOP COMMENT**

Will the District provide any additional information at the time Rule 67.0.1 becomes effective?

**DISTRICT RESPONSE**

Yes, following the rule's adoption and prior to the rule's effective date, the District will issue a Compliance Advisory to the regulated community with a summary of the new requirements. The Advisory will also be placed on the District's website. In the interim, this Workshop Report and the proposed new rule will be provided to all workshop participants, including persons who submitted written comments.

**17. WORKSHOP COMMENT**

Is it possible to provide some additional comments after this workshop?

**DISTRICT RESPONSE**

Yes, additional comments may be provided after the workshop. Comments provided within three weeks after the workshop will be reflected in the Workshop Report.

**18. WORKSHOP COMMENT**

The labeling provision of the proposed rule requires specialty primers, sealers and undercoaters, manufactured between 2010 and 2012, to have labels indicating the date of manufacturing. Would it be more logical to extend the labeling requirement to the date of Rule 67.0.1 adoption, i.e., “between 2010 and 2014?”

**DISTRICT RESPONSE**

This labeling provision of the SCM is now outdated and therefore has been deleted from proposed Rule 67.0.1 pursuant to CARB’s request. Please see the District’s response to Comment 26.

However, the application of primers, sealers and undercoaters manufactured before the effective date of proposed Rule 67.0.1 is allowed at any time, provided the date of manufacturing is listed on the label of the coating container (Subsection (d)(4) of the proposed rule).

**19. WORKSHOP COMMENT**

Current Rule 67.0 includes an averaging provision. Is the averaging provision still available for sources subject to the proposed new rule?

**DISTRICT RESPONSE**

No, the averaging provision is excluded from proposed Rule 67.0.1 in accordance with the SCM.

**20. WORKSHOP COMMENT**

Sealers are included in Subsection (c)(43) as a part of the Primers, Sealers and Undercoaters category. However, Subsection (c)(68) for Wood Coatings also includes Sealers. There seems to be a contradiction.

**DISTRICT RESPONSE**

The definition in Subsection (c)(43) of the proposed rule applies to general sealers that can be used for a variety of substrates. However, the definition in Subsection (c)(68) applies only to sanding sealers and sealers used exclusively for wood products, such as wood sealers used as topcoats.

**21. EPA COMMENT**

EPA recommends including a labeling requirement for containers of coatings that do not need additional thinning, similar to a corresponding provision in the SCM.

**DISTRICT RESPONSE**

The District agrees. The labeling requirement in Subsection (e)(1) has been amended as suggested.

**22. CARB COMMENT**

All the test methods and other analytical procedures recommended in the SCM must be updated to include their most current versions.

**DISTRICT RESPONSE**

The District agrees. All ASTM methods and other SCM recommended test procedures have been updated.

**23. CARB COMMENT**

The definition of Traffic Marking Coatings should include a reference to the procedure specified in Subsection (f)(2)(ii)(L), for analyzing the VOC content of Methacrylate Multicomponent Coatings used as traffic marking coatings.

**DISTRICT RESPONSE**

The District agrees. The definition in Subsection (c)(59) of the proposed rule has been revised accordingly.

**24. CARB COMMENT**

The labeling requirements for Specialty Primers, Sealers and Undercoaters expired in 2007. They do not need to be included in the definition of these coatings.

**DISTRICT RESPONSE**

The District agrees. The labeling requirements have been deleted for this coating category.



**25. CARB COMMENT**

For consistency with the SCM, the definition of wood coating category should include the sentences specifying that the wood coating category does not include clear sealers that are labeled and formulated for use on concrete/masonry surfaces or coatings intended for substrates other than wood.

**DISTRICT RESPONSE**

The District agrees. These sentences are now included in the proposed definition (Subsection (c)(68)).

**26. CARB COMMENT**

Labeling requirements in Subsection (e)(2)(vi) should be deleted, since they expired on January 1, 2012.

**DISTRICT RESPONSE**

The District agrees. Subsection (e)(2)(vi) has been deleted.

NY:RR:jl  
03/18/15

**RULE 67.0. ARCHITECTURAL COATINGS**

(Effective 11/30/77:  
Rev. Adopted & Effective 12/12/01)

***TO BE REPEALED*** (January 1, 2016)

**(a) APPLICABILITY**

(1) Except as provided in Section (b), this rule is applicable to any person who manufactures, supplies, sells, offers for sale, applies, or solicits the application of any architectural coating for use within San Diego County.

(2) Rule 66 shall not apply to any coating subject to this rule.

**(b) EXEMPTIONS**

(1) This rule shall not apply to:

(i) Any architectural coating that is sold or manufactured for use outside of San Diego County or for shipment to other manufacturers for reformulation or repackaging.

(ii) Any aerosol coating product.

(iii) Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

(iv) Emulsion-type bituminous pavement sealers applied to roads.

(2) The provisions of Subsection (d)(1) shall not apply to lacquers applied on days with relative humidity greater than 70 percent and temperatures below 65°F. On such days, up to ten percent by volume of VOC may be added to a lacquer, to avoid blushing of the finish, provided that the lacquer contains acetone and no more than 550 grams of VOC per liter of lacquer, less water and exempt compounds, prior to the addition of VOC.

**(c) DEFINITIONS**

(1) “**Adhesive**” means any chemical substance that is applied for the purpose of bonding 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 by means of a propellant, and is packaged in a disposable can either for hand-held application or use in specialized equipment for ground traffic/marketing applications.

(3) “**Antenna Coating**” means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to 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 U.S. Environmental Protection Agency (EPA) 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) “**Appurtenance**” means any accessory 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 Coating**” means coating to be applied to stationary structures and/or their appurtenances at the site of installation (stationary source), to portable buildings including mobile homes, at the site of installation, to pavement, or to curbs. Coatings applied in off-site 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 materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consisting mainly of hydrocarbons, and obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(8) “**Bituminous Roof Coating**” means a coating which incorporates bitumens that is labeled and formulated exclusively for roofing.

(9) “**Bituminous Roof Primer**” means a primer which incorporates bitumens that is labeled and formulated exclusively for roofing.

(10) “**Bond Breaker**” means a coating labeled and formulated for application between layers of concrete to prevent a freshly-poured top layer of concrete from bonding to the layer over which it is poured.

(11) “**Clear Brushing Lacquers**” mean 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 Subsection (e)(1)(v).

(12) “**Clear Wood Coatings**” mean 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 that is added to an architectural coating after packaging in sale units to produce the desired color.

(15) “**Concrete Curing Compound**” means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

(16) “**Dry Fog Coating**” means a coating 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 the same as defined in Rule 2.

(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 structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, and 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. The fire-resistive coating and the testing agency must be approved by building code officials.

(20) “**Fire-Retardant Coating**” means a coating labeled and formulated to retard ignition and flame spread, and that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials.

(21) “**Flat Coating**” means a coating that is not defined under any other definition in this rule and that registers a gloss of less than 15 on an 85° meter, or less than 5 on a 60° meter.

(22) “**Floor Coating**” means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces which may be subject to foot traffic.

(23) “**Flow Coating (Electrical Transformers)**” means a coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

(24) “**Form-Release Compound**” means a coating 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 Coating or Sign Paint**” means a coating 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 Coating**” means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 400°F (204°C).

(27) “**Industrial Maintenance Coating**” means a high performance architectural coating, 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 Subsection (e)(1)(iv):

- (i) Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- (ii) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- (iii) Repeated exposure to temperatures above 250°F (121°C);
- (iv) Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
- (v) Exterior exposure of metal structures and structural components.

(28) “**Lacquer**” means a clear or opaque wood coating, 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**” means a coating that contains one pound or less of solids per gallon (120 grams or less of solids per liter) of coating material.

(30) “**Magnesite Cement Coating**” means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(31) “**Manufacturer’s Maximum Thinning Recommendation**” means the maximum recommended thinning ratio that is indicated on the label or lid of the coating container.

(32) “**Mastic Texture Coating**” means a coating labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 0.010 inch (10 mils) dry film thickness.

(33) “**Metallic Pigmented Coating**” means a coating containing at least 0.4 pounds of elemental metallic pigment per gallon (48 grams of elemental metallic pigment per liter) of coating as applied.

(34) “**Multi-Color Coating**” means a coating that is packaged in a single container and exhibits more than one color when applied in a single coat.

(35) “**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° meter or 5 or greater on a 60° meter.

(36) “**Nonflat-High Gloss Coating**” means a nonflat coating that registers a gloss of 70 or above on a 60° meter.

(37) “**Non-Industrial 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.

(38) “**Post-Consumer Coating**” means a finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer. Post-consumer coating does not include manufacturing wastes.

(39) “**Pre-Treatment Wash Primer**” means a primer that contains a minimum of 0.5 percent acid, by weight, and is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

(40) “**Primer**” means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

(41) “**Quick-Dry Enamel**” means a nonflat coating that is labeled as specified in Subsection (e)(1)(viii) and that is formulated to have the following characteristics:

(i) Capable of being applied directly from the container under normal conditions at ambient temperatures between 60 and 80°F (16 and 27°C);

(ii) When tested in accordance with ASTM Designation D 1640-95, sets to touch in two hours or less, is tack free in four hours or less, and dries hard in eight hours or less by the mechanical test method; and

(iii) Has a dried film gloss of 70 or above on a 60° meter.

(42) “**Quick-Dry Primer, Sealer, and Undercoater**” means a primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be recoated in two hours.

(43) “**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 ten percent of the total weight consisting of post-consumer coating.

(44) “**Roof Coating**” means a non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. Roof coatings, which qualify as metallic pigmented coating shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coating category.

(45) “**Rust Preventative Coating**” means a coating formulated for non-industrial use to prevent the corrosion of metal surfaces and labeled as specified in Subsection (e)(1)(vi).

(46) “**Sanding Sealer**” means a clear or semi-transparent wood coating 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 applications 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) “**Sealer**” means a coating labeled and formulated for application to a substrate for either of the following purposes: to prevent subsequent coatings from being absorbed by the substrate or to prevent harm to subsequent coatings by materials in the substrate.

(48) “**Secondary Coating (Rework)**” means the fragment of a finished coating or the 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) “**Shellac**” means a clear or opaque coating 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 Primer, Sealer, and Undercoater**” means a coating that is labeled as specified in Subsection (e)(1)(vii) and 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.

(53) “**Stain**” means a clear, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.

(54) “**Swimming Pool Coating**” means a coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals.

(55) “**Swimming Pool Repair and Maintenance Coating**” means a rubber-based coating labeled and formulated to be used over existing rubber-based coatings for the repair and maintenance of swimming pools.

(56) “**Temperature-Indicator Safety Coating**” means a coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 400°F (204°C).

(57) “**Tint Base**” means an architectural coating to which colorant is added after packaging to produce a desired color.

(58) “**Traffic Marking Coating**” means a coating labeled and formulated for marking and stripping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.

(59) “**Undercoater**” means a coating labeled and formulated to provide a smooth surface for subsequent coats.

(60) “**Varnish**” means a clear or semi-transparent wood coating, 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.

(61) “**Volatile Organic Compound (VOC)**” means the same as defined in Rule 2.

(62) “**VOC Content Per Volume of Coating, Less Water and Exempt Compounds**” means the same as defined in Rule 2 and calculated as specified in Subsection (e)(2).

(63) “**VOC Content Per Volume of Material**” means the same as defined in Rule 2 and calculated as specified in Subsection (e)(2).

(64) “**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.

(65) “**Waterproofing Sealer**” means a coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.



(66) “**Wood Preservative**” means a coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. EPA 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 Subsections (b)(2), (d)(2), (d)(3), and (d)(5), no person shall:

- (i) manufacture, blend, or repack for sale within San Diego County;
- (ii) supply, sell, or offer for sale within San Diego County; or
- (iii) solicit for application or apply within San Diego County, any architectural coating with a VOC content in excess of the corresponding limits specified in Table I after the specified effective dates.

**Table I - VOC Standards**

Coating Categories	Effective 12/12/01		Effective 1/1/2003		Effective 1/1/2004	
	Limit <sup>1,2</sup> lb/gal (g/l)		Limit <sup>1,2</sup> lb/gal (g/l)		Limit <sup>1,2</sup> lb/gal (g/l)	
General Coatings:						
Flat Coatings	2.1	(250)	0.8	(100)		
Nonflat Coatings	2.1	(250)	1.3	(150)		
Nonflat Coatings – High Gloss	2.1	(250)				
Specialty Coatings:						
Antenna Coatings	4.4	(530)				
Antifouling Coatings	3.3	(400)				
Bituminous Roof Coatings	2.5	(300)				
Bituminous Roof Primers	2.9	(350)				
Bond Breakers	2.9	(350)				
Clear Wood Coatings:						
Clear Brushing Lacquer	5.7	(680)				
Lacquers (including lacquer sanding sealers)	5.7	(680)	4.6	(550)		
Sanding Sealers (other than lacquer sanding sealers)	4.6	(550)	2.9	(350)		
Varnishes	2.9	(350)				
Concrete Curing Compounds	2.9	(350)				
Dry Fog Coatings	3.3	(400)				
Faux Finishing Coatings	2.9	(350)				
Fire Resistive Coatings	2.9	(350)				
Fire Retardant Coatings:						
Clear	5.4	(650)				
Opaque	2.9	(350)				
Floor Coatings	3.3	(400)	2.1	(250)		
Flow Coatings	3.5	(420)				

**Table I - VOC Standards - Continued**

Coating Categories	Effective 12/12/01		Effective 1/1/2003		Effective 1/1/2004	
	Limit <sup>1,2</sup>		Limit <sup>1,2</sup>		Limit <sup>1,2</sup>	
	lb/gal	(g/l)	lb/gal	(g/l)	lb/gal	(g/l)
Form-Release Compounds	2.1	(250)				
Graphic Arts Coatings (Sign Paints)	4.2	(500)				
High Temperature Coatings	5.4	(650)	3.5	(420)		
Industrial Maintenance Coatings	3.5	(420)			2.1	(250)
Low-Solids Coatings <sup>3</sup>	1.0	(120)				
Magnesite Cement Coatings	5.0	(600)	3.8	(450)		
Mastic Texture Coatings	2.5	(300)				
Metallic Pigmented Coatings	4.2	(500)				
Multi-Color Coatings	4.8	(580)	2.1	(250)		
Pre-Treatment Wash Primers	6.5	(780)	3.5	(420)		
Primers, Sealers, and Undercoaters	2.9	(350)	1.7	(200)		
Quick-Dry Enamels	3.3	(400)	2.1	(250)		
Quick-Dry Primers, Sealers, Undercoaters	4.4	(525)	1.7	(200)		
Recycled Coatings	2.1	(250)				
Roof Coatings	2.5	(300)	2.1	(250)		
Rust Preventative Coatings	3.3	(400)				
Shellacs:						
Clear	6.1	(730)				
Opaque	4.6	(550)				
Specialty Primers, Sealers, and Undercoaters	2.9	(350)				
Stains	2.9	(350)	2.1	(250)		
Swimming Pool Coatings	5.4	(650)	2.8	(340)		
Swimming Pool Repair & Maintenance Coatings	5.4	(650)	2.8	(340)		
Temperature-Indicator Safety Coatings	4.6	(550)				
Traffic Marking Coatings	2.1	(250)	1.3	(150)		
Waterproofing Sealers	3.3	(400)	2.1	(250)		
Waterproofing Concrete/Masonry Sealers	3.3	(400)				
Wood Preservatives	2.9	(350)				

<sup>1</sup> Remains in effect unless revised limits are indicated in subsequent columns. The VOC content limits take into account the "Manufacturer's Maximum Thinning Recommendation," if any.

<sup>2</sup> Expressed in pounds VOC per gallon (or grams VOC per liter) of coating, as applied, less water, exempt compounds, and colorant added to tint bases.

<sup>3</sup> VOC content limits are expressed in pounds of VOC per gallon (or grams of VOC per liter) of coating, as applied, including water and exempt compounds.

## (2) COATINGS NOT LISTED IN TABLE I

For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table I, 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 Subsections (c)(21), (c)(35) and (c)(36) and the corresponding flat or nonflat VOC content limit shall apply.

### **(3) MOST RESTRICTIVE VOC LIMITS**

If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, 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 I, then the most restrictive VOC content limit shall apply. This provision does not apply to the coating categories specified below:

- (i) Antenna coatings,
- (ii) Antifouling Coatings,
- (iii) Bituminous roof primers,
- (iv) Fire-retardant coatings,
- (v) Flow coatings (Electrical Transformers),
- (vi) High-temperature coatings,
- (vii) Industrial maintenance coatings,
- (viii) Lacquers (including lacquer sanding sealers),
- (ix) Low-solids coatings,
- (x) Metallic pigmented coatings,
- (xi) Pre-treatment wash primers,
- (xii) Shellacs,
- (xiii) Specialty primers, sealers, and undercoaters,
- (xiv) Temperature-indicator safety coatings, or
- (xv) Wood preservatives.

### **(4) SELL-THROUGH OF COATINGS**

(i) A coating manufactured prior to the January 1, 2003, or January 1, 2004, effective date specified for that coating in Table I 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 I may be applied at any time, both before and after the specified effective 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 does not display the date or date-code required by Subsection (e)(1)(i).

(ii) A coating included in an approved Averaging Program that does not comply with the specified limit in Table I 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 coating averaging provisions in California" or a substitute symbol specified by the Executive Officer of the CARB. This Subsection shall remain in effect until January 1, 2008.

**(5) RUST PREVENTIVE COATINGS**

After January 1, 2004, a person shall only apply or solicit the application of a rust preventative coating for non-industrial uses, unless the rust preventative coating complies with the industrial maintenance coating VOC limit specified in Table I.

**(6) STATEWIDE AVERAGING COMPLIANCE OPTION**

On or after January 1, 2003, in lieu of compliance with the limits specified in Table I 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 preventative coatings; stains; waterproofing sealers, as well as flats and nonflats (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. This Subsection and Appendix A shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.

**(7) 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 I.

**(8) PAINTING PRACTICES**

Any person who stores, transfers, applies or otherwise uses architectural coatings, thinners, cleanup solvents, or other materials which contain volatile organic compounds shall comply with the requirements of Rule 67.17 – Storage of Materials Containing Volatile Organic Compounds.

**(e) ADMINISTRATIVE REQUIREMENTS**

**(1) CONTAINER LABELING REQUIREMENT:**

Each manufacturer of any architectural coating subject to this rule shall display the information listed in Subsections (e)(1)(i) through (e)(1)(ix) on the coating container (or label) in which the coating is sold or distributed.

(i) **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 CARB.

(ii) **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 is to be applied without thinning.

(iii) **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 as grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data or determined using the test methods in Subsection (f)(2). The equations in Subsection (e)(2) shall be used to calculate VOC content.

(iv) **Industrial Maintenance Coatings:** In addition to the information specified in Subsections (e)(1)(i), (e)(1)(ii), and (e)(1)(iii), 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 in Subsections (e)(1)(iv)(A) through (e)(1)(iv)(C).

- (A) "For industrial use only."
- (B) "For professional use only."
- (C) "Not for residential use" or "Not intended for residential use."

(v) **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."

(vi) **Rust Preventative Coatings:** Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only."

(vii) **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 in Subsections (e)(1)(vii)(A) through (e)(1)(vii)(E).

- (A) For blocking stains.
- (B) For fire-damaged substrates.
- (C) For smoke-damaged substrates.
- (D) For water-damaged substrates.
- (E) For excessively chalky substrates.

(viii) **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.

(ix) **Nonflat-High Gloss Coatings:** Effective January 1, 2003, the labels of all nonflat-high gloss coatings shall prominently display the words "High Gloss."

## (2) CALCULATION OF VOC CONTENT

For the purpose of determining compliance with the VOC content limits in Table I, the VOC content of a coating shall be determined by using the procedures described in Subsections (e)(2)(i) or (e)(2)(ii), as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

(i) 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 thinning recommendation, excluding the volume of any water and exempt compounds. Determine the VOC content using the following equation:

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

Where:

VOC content	=	grams of VOC per liter of coating
$W_s$	=	weight of all 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

(ii) 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 the following equation:

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

Where:

VOC content <sub>ls</sub>	=	the VOC content of a low solids coating in grams of VOC per liter of coating
$W_s$	=	weight of all 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

## (f) MONITORING AND RECORDS

### (1) REPORTING REQUIREMENTS

(i) **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 written report to the Executive Officer of the CARB. The report shall specify the number of gallons of clear brushing lacquers sold in California during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.

(ii) **Rust Preventative Coatings:** Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual written report to the Executive Officer of the CARB. The report shall specify the number of gallons of rust preventative coatings sold in California during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.

(iii) **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 written report to the Executive Officer of the CARB. The report shall specify the number of gallons of specialty primers, sealers, and undercoaters sold in California during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.

(iv) **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 in the year 2004, report in writing to the Executive Officer of the CARB the following information for products sold in California 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 I to which the coating belongs;

(C) the total sales in California during the calendar year to the nearest gallon; the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.

(v) **Recycled Coating:** Manufacturers of recycled coatings must submit a letter to the Executive Officer of the CARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual written report to the Executive Officer of the CARB. The report shall include, for all recycled coatings, the total number of gallons distributed in California during the preceding year, and shall describe the method used by the manufacturer to calculate California's distribution.

(vi) **Bituminous Coatings:** Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual written report to the Executive Officer of the CARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in California during the preceding calendar year, and shall describe the method used by the manufacturer to calculate California's sales.

## (2) TESTING PROCEDURES

(i) **VOC Content:** To determine the physical properties of a coating in order to perform the Subsection (e)(2) calculations, the reference method for VOC content is U.S. EPA Method 24, incorporated by reference in Subsection (f)(2) (iv)(K), except as provided in Subsections (f)(2)(ii) and (f)(2)(iii). An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Subsection (f)(2)(iv)(L). The exempt compounds content shall be determined by South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised August 1996), incorporated by reference in Subsection (f)(2)(iv)(J). To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Subsection (f)(2)(ii), 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 test results will govern, except when an alternative method is approved as specified in Subsection (f)(2)(ii). The Air Pollution Control Officer may require the manufacturer to conduct a Method 24 analysis.

(ii) **Alternative Test Method:** Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Subsection (f)(2)(i), after review and approval in writing by the staffs of the District, the CARB, and the U.S. EPA, may also be used.

(iii) **Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (Appendix A), incorporated by reference in Subsection (f)(2)(iv)(M). This method has not been approved for methacrylate multi-component coatings used for purposes other than as traffic marking coatings or for other classes of multi-component coatings.

(iv) **Test Methods:** The following test methods are incorporated by reference herein, and shall be used to test coatings subject to provisions of this rule:

(A) Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Subsection (c)(20), Fire-Retardant Coating).

(B) Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Subsection (c)(19), Fire-Resistive Coating).



(C) Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), “Standard Test Method for Specular Gloss” (see Subsections (c)(21), (c)(35), (c)(36), and (c)(41), Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating, and Quick-Dry Enamels).

(D) Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, “Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction,” SCAQMD “Laboratory Methods of Analysis for Enforcement Samples” (see Subsection (c)(33), Metallic Pigmented Coating).

(E) Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products” (see Subsection (c)(39), Pre-Treatment Wash Primers).

(F) Drying Times: The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, “Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature” (see Subsections (c)(41) and (c)(42), 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 ASTM Designation D 1640-95.

(G) Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, “Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films” (see Subsection (c)(52), 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 Subsection (e)(2)) by Bay Area Air Quality Management District (BAAQMD) District Method 43, “Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials,” BAAQMD Manual of Procedures, Volume III, adopted 11/6/96, (see Subsection (c)(61), Volatile Organic Compounds and Subsection (e)(2)(i)).

(I) (Exempt Compounds – Parachlorobenzotrifluoride PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Subsection(f)(2) by BAAQMD Method 41, “Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride,” BAAQMD Manual of Procedures, Volume III, adopted 12/20/95, (see Subsection (c)(61), Volatile Organic Compound and Subsection (f)(2)(i)).

(J) Exempt Compounds: The content of compounds exempt under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (August 1996), “Determination of Exempt Compounds,” SCAQMD “Laboratory Methods of Analysis for Enforcement Samples,” (see Subsection (c)(61), Volatile Organic Compound and Subsection (f)(2)(i)).

(K) VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, “Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings” (see Subsection (f)(2)(i)).

(L) Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (February 1996), “Determination of Volatile Organic Compounds (VOC) in Various Materials,” SCAQMD “Laboratory Methods of Analysis for Enforcement Samples” (see Subsection (f)(2)(i)).

(M) Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multi-component coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR Part 59, Subpart D, Appendix A, “Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coating” (September 11, 1998), (see Subsection (f)(2)(i)).

## Appendix A

### A.1 AVERAGING PROVISION

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), 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 Subsection (e)(2), 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 (as listed in Table I)

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 I. The manufacturer shall not include any quantity of coatings that it knows or

should have known will not be used in California, if statewide coatings data are used. If district-specific coatings data are used, the manufacturer shall not include any quantity of coatings 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 VOC content in excess of the following maximum VOC content, for the applicable categories.

<b>Averaging Categories and VOC Ceiling (Maximum VOC Allowed)</b>				
Category	VOC Limit Effective 1/1/2003		Averaging VOC Ceiling (Maximum)	
	<u>lb/gal</u>	<u>g/l</u>	<u>lb/gal</u>	<u>g/l</u>
Flat Coating	0.8	100	2.1	250
Nonflat Coating	1.3	150	2.1	250
Floor Coatings	2.1	250	3.3	400
Industrial Maintenance Coatings	2.1*	250*	3.5	420
Primers, Sealers, and Undercoaters	1.7	200	2.9	350
Quick-Dry Primers, Sealers, & Undercoaters	1.7	200	3.8	450
Quick-Dry Enamels	2.1	250	3.3	400
Roof Coatings	2.1	250	2.1	250
Bituminous Roof Coatings	2.5	300	2.1	300
Rust Preventative Coatings	3.3	400	3.3	400
Stains	2.1	250	2.9	350
Waterproofing Sealers	2.1	250	3.3	400

\*Effective 1/1/2004

## **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 Air Resources Board. As used in this Appendix A, "Executive Officer" means the Executive Officer of the 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 I, 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 I. The demonstration shall use the equation specified in Section 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 Section 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 15 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 the table in Section 301 shall display the following statement: "This product is subject to architectural coatings averaging provisions 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 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.

## **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.