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(Proposed Amended Rule 1106 February 2019)
(Public Workshop Version)

PROPOSED AMENDED RULE 1106. MARINE AND PLEASURE CRAFT – COATING ~~OPERATION~~S

(a) Purpose

The purpose of this rule is to reduce emissions of Volatile Organic Compounds (VOC) and stratospheric ozone depleting and global warming compounds from Marine and Pleasure Craft Coatings.

(~~a~~b) Applicability

This rule applies to:

(1) MARINE COATINGS:

~~This rule applies to~~Which are coatings ~~operations of~~ intended for boats, ships, and vessels, and their appurtenances, including but not limited to structures, such as piers, docks, ~~and to~~ buoys and oil drilling rigs, intended for the exposure to either a marine or fresh water environment.~~Coating operations of vessels which are manufactured or operated primarily for recreational purposes are subject to the requirements of Rule 1106.1 - Pleasure Craft Coating Operations.~~

(2) PLEASURE CRAFT COATINGS:

Which are coatings intended for purposes of refinishing, repairing, modifying, or manufacturing of pleasure craft as defined in paragraph (c)(30) of this rule, and to their parts and components.

(~~b~~c) Definitions

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

(1) AEROSOL COATING PRODUCT ~~is~~ means a pressurized coating product containing pigments, ~~or~~ resins, and/or other coating solids that ~~is dispensed~~ dispenses product ingredients by means of a propellant, and is packaged in a disposable aerosol container ~~can~~ for hand-held application.

(2) AIR DRIED COATING is any coating that is formulated by the manufacturer to be cured at a temperature below 90 °~~o~~C (194 °~~o~~F).

(3) ANTENNA COATING is any coating applied to equipment and associated structural appurtenances ~~which~~ that are used to receive or transmit electromagnetic signals.

(4) ~~ANTIFOULING~~ ANTIFOULANT COATING is any coating applied to the underwater portion of ~~a~~ boats, ships, vessels, ~~vessel~~ or pleasure craft to prevent or reduce the attachment of biological organisms~~. An antifouling coating~~ and shall be registered with the ~~Environmental Protection Agency (EPA) as a pesticide~~United States Environmental Protection Agency ("U.S. EPA") as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136).

(5) BAKED COATING is any coating that is formulated by the manufacturer to be cured at a temperature at or above 90 °~~o~~C (194 °~~o~~F).

(6) CLEAR WOOD COATINGS are clear and semi-transparent topcoats applied to wood substrates to provide a transparent or translucent film.

(7) DISTRIBUTOR means any person to whom a product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

(~~6~~8) ELASTOMERIC ADHESIVE is any adhesive containing natural or synthetic rubber.

(9) ENERGY CURABLE COATINGS are single-component reactive products that cure upon exposure to visible ~~-~~light, ultra-violet light or to an electron beam. The VOC content of thin film Energy Curable Marine and Pleasure Craft Coatings may be determined by manufacturers using ASTM Test Method 7767-11 "Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them"

(~~7~~10) EXEMPT COMPOUNDS ~~are any of the following compounds:~~(See Rule 102 - Definition of Terms.)

~~(A) Group I (General)~~

~~trifluoromethane (HFC-23)~~

~~pentafluoroethane (HFC-125)~~

~~1,1,2,2-tetrafluoroethane (HFC-134)~~

~~tetrafluoroethane (HFC-134a)~~

~~1,1,1-trifluoroethane (HFC-143a)~~

~~1,1-difluoroethane (HFC-152a)~~

~~chlorodifluoromethane (HCFC-22)~~

~~dichlorotrifluoroethane (HCFC-123)~~

~~2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)~~

~~dichlorofluoroethane (HCFC-141b)~~

~~chlorodifluoroethane (HCFC-142b)~~

~~cyclic, branched, or linear, completely fluorinated alkanes~~

~~cyclic, branched, or linear, completely fluorinated ethers with no unsaturations~~

~~cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations~~

~~sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine~~

~~(B) Group II~~

~~methylene chloride~~

~~1,1,1-trichloroethane (methyl chloroform)~~

~~trichlorotrifluoroethane (CFC-113)~~

~~dichlorodifluoromethane (CFC-12)~~

~~trichlorofluoromethane (CFC-11)~~

~~dichlorotetrafluoroethane (CFC-114)~~

~~chloropentafluoroethane (CFC-115)~~

~~The use of Group II compounds and/or carbon tetrachloride may be restricted in the future because they are toxic, potentially toxic, upper-atmosphere ozone depleters, or cause other environmental impacts. By January 1, 1996, production of chlorofluorocarbons (CFC), 1,1,1,-trichloroethane (methyl chloroform), and carbon tetrachloride will be phased out in accordance with the Code of Federal Regulation Title 40, Part 82 (December 10, 1993).~~

(~~8~~11) EXTREME HIGH GLOSS COATING is any coating ~~which~~ that achieves at least 95 percent reflectance on a 60° ~~o~~ meter when tested by ASTM Test Method D-523-14 "Standard Test Method for Specular Gloss".

(12) FINISH PRIMER/SURFACER is any coating applied with a wet film thickness of less than 10 mils (one mil = 0.001 of an inch) and is applied prior to the application of a Marine or Pleasure Craft Coating for the purpose of providing corrosion resistance, adhesion for subsequent coatings, a moisture barrier, or promotes a uniform surface necessary for filling in surface imperfections.

(~~9~~13) GRAMS OF VOC PER LITER OF COATING~~,~~ LESS WATER AND LESS EXEMPT COMPOUNDS, (REGULATORY VOC), is the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

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

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

(14) GRAMS OF VOC PER LITER OF MATERIAL, (ACTUAL VOC), is the weight of VOC per volume of material and shall be calculated by the following equation:

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

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

(~~10~~15) HEAT RESISTANT COATING is any coating ~~which~~ that during normal use must withstand temperatures of at least 204 °~~o~~C (400 °~~o~~F).

(~~11~~16) HIGH GLOSS COATING is any coating ~~which~~ that achieves at least 85 percent reflectance on a 60°~~o~~ meter when tested by ASTM Method D-523-14 "Standard Test Method for Specular Gloss".

(~~12~~17) HIGH TEMPERATURE COATING is any coating that during normal use ~~which~~ must withstand temperatures of at least 426 °~~o~~C (800 °~~o~~F).

(18) HIGH BUILD PRIMER/SURFACER is any coating applied with a wet film thickness of 10 mils or more (one mil = 0.001 of an inch) prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections.

(19) HIGH-VOLUME, LOW-PRESSURE (HVLP) means spray application equipment designed to atomize 100 percent by air pressure only and is operated between 0.1 and 10 pounds per square inch gauge (psig), air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

(20) INORGANIC ZINC COATING is a coating that contains 960 grams per liter or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance.

(~~13~~21) LOW ACTIVATION INTERIOR COATING is any coating used on interior surfaces aboard ~~ships~~ boats, ships, and vessels, to minimize the activation of pigments on painted surfaces within a radiation environment.

(22) LOW-SOLIDS COATINGS are coatings containing one pound or less of solids per gallon of material.

(~~14~~23) MARINE COATING is any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by any means to ~~ships,~~ boats, ships, and vessels, and their appurtenances, and structures such as piers, ~~and~~ docks, ~~to~~ buoys and oil drilling rigs, intended for the exposure to either a marine or fresh water environment.

(24) MARINE DECK SEALANT PRIMER is any sealant primer intended by the manufacturer to be applied to wooden marine decks. A sealant primer is any product intended by the manufacturer to be applied to a substrate, prior to the application of a sealant, to enhance the bonding surface.

(~~15~~25) METALLIC HEAT RESISTANT COATING is any coating ~~which~~ that contains more than 5 grams of metal particles per liter of coating as applied and ~~which~~ must withstand temperatures over 80 °~~o~~C (~~175~~176 °~~o~~F).

(26) MIST COATING is any low viscosity, thin film, epoxy coating applied to an inorganic zinc primer that penetrates the porous zinc primer and allows the occluded air to escape through the film prior to curing.

(~~16~~27) NAVIGATIONAL AIDS COATING is any coating that is applied to ~~are~~ buoys or other Coast Guard waterway markers that are recoated aboard ship at their usage site and immediately returned to the water.

(28) NONSKID COATING means any coating applied to the horizontal surface of a marine vessel for the specific purpose of providing slip resistance for personnel.

(29) ORGANIC ZINC COATING is a coating that contains 960 grams per liter or more elemental zinc incorporated into an organic silicate binder that is applied to steel to provide galvanic corrosion resistance.

~~(17) PRETREATMENT WASH PRIMER is any coating which contains at least 1/2 percent acids, by weight, to provide surface etching and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.~~

(30) PLEASURE CRAFT are marine or fresh water vessels that are less than 20 meters in length and are manufactured or operated primarily for recreational purposes, or are leased, rented, or chartered to a person or business for recreational purposes. Vessels operated in amusement theme parks in a fresh water environment solely for the purpose of an amusement park attraction shall be considered pleasure craft vessels regardless of their length. The owner or operator of a pleasure craft vessel shall be responsible for certifying that the intended use is for recreational purposes.

(31) PLEASURE CRAFT COATING is any marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft.

(32) PRETREATMENT WASH PRIMER is a coating that contains a minimum of 1/2 percent acid, by weight, applied directly to bare metal surfaces to provide necessary surface etching.

(~~18~~33) REPAIR AND MAINTENANCE THERMOPLASTIC COATING is any resin-bearing coating, such as vinyl, chlorinated rubber, or bituminous coatings, in ~~which~~ that the resin becomes pliable with the application of heat, and is used to recoat portions of a previously coated substrate ~~which~~ that has sustained damage to the coating following ~~normal~~ the initial coating ~~operations~~.

(~~19~~34) SEALANT FOR WIRE-SPRAYED ALUMINUM is any coating of up to one mil (one mil = 0.001 of an inch) in thickness of an epoxy material ~~which~~ that is reduced for application with an equal part of an appropriate solvent (naphtha, or ethylene glycol monoethyl ether).

(35) SEALER is a coating applied to bare wood to seal surface pores to prevent subsequent coatings from being absorbed into the wood.

(~~20~~36) SOLVENT CLEANING ~~OPERATION~~ is ~~the removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants from parts, products, tools, machinery, equipment, and general work areas. Contaminants include, but are not limited to, dirt, soil, and grease. In a cleaning process which consists of a series of cleaning methods, each distinct method shall constitute a separate solvent cleaning operation~~ as defined in Rule 1171 - Solvent Cleaning Operations.

(~~21~~37) SPECIAL MARKING COATING is any coating used for items such as flight decks, ~~ships'~~ vessel identification numbers~~,~~ and other demarcations for safety~~/~~ or identification ~~applications~~.

(~~22~~38) TACK COAT is an epoxy coating of up to two mils ~~(0.002 inch)~~ (one mil = 0.001 of an inch) thick applied to an existing epoxy coating. The existing epoxy coating must have aged beyond the time limit specified by the manufacturer for application of the next coat.

(39) TEAK PRIMER is a coating applied to teak wood or previously oiled teak wood decks in order to improve the adhesion of a seam sealer.

(40) TOPCOAT is any final coating applied to the interior or exterior of a marine or pleasure craft.

(~~23~~41) TOUCH-UP COATING is any coating applied incidental to the main coating process but necessary ~~used~~ to cover minor imperfections ~~prior to shipment appearing after the main coating operation~~ or minor mechanical damage incurred prior to use.

(42) TRANSFER EFFICIENCY means the amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage.

(~~24~~43) UNDERSEA WEAPONS SYSTEM COATING is any coating applied to any or all components of a weapons system intended for exposure to a marine environment and ~~that is~~ intended to be launched or fired ~~underwater~~ undersea.

(44) VARNISHES are clear or pigmented wood topcoats formulated with various resins to dry by chemical reaction.

(~~25~~45) VOLATILE ORGANIC COMPOUND (VOC) is ~~any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds~~as defined in Rule 102 - Definition of Terms.

(~~26~~46) WIRE-SPRAYED ALUMINUM is any molten multi-aluminum coating applied to a steel substrate using oxygen fueled combustion spray ~~methods~~ equipment.

(~~c~~d) Requirements

(1) VOC Content of Marine Coatings

Except as otherwise provided in this rule, a person shall not apply a marine coating within the SCAQMD jurisdiction with a VOC content in excess of the following limits shown in the Table of Standards I, expressed as grams of VOC per liter of coating, as applied, less water and less exempt solvents:

	~~Baked~~	~~Air Dried~~
~~General Coating~~	~~275 g/L~~	~~340 g/L~~
~~Specialty Coating~~		
~~Heat Resistant~~	~~360~~	~~420~~
~~Metallic Heat Resistant~~		~~530~~
~~High Temperature~~		~~500~~
~~Pre-Treatment Wash Primer~~	~~780~~	~~780~~
~~Underwater Weapons Systems~~	~~275~~	~~340~~
~~Elastomeric Adhesives with~~		

~~15%, by Weight, Natural or Synthetic Rubber 730 Solvent Based Inorganic Zinc 650~~

~~Navigational Aids 340~~

~~Sealant for Wire-Sprayed Aluminum 610~~

~~Special Marking 490~~

~~Tack Coat 610~~

~~Low Activation Interior Coating 420~~

~~Repair and Maintenance Thermoplastic 550~~

~~Extreme High-Gloss Coating 420 490~~

~~Antenna Coating 530~~

~~Antifoulant 400~~

~~High Gloss 275 340~~

TABLE OF STANDARDS I

MARINE COATING CATEGORY	VOC LIMITS Less water and exempt compounds Grams per Liter (g/L)	
	BAKED	AIR DRIED
	CURRENT LIMIT	CURRENT LIMIT
Antenna Coating		340
Antifoulant Coatings:		
Aluminum Substrates		560
Other Substrates		400
Elastomeric Adhesives (with 15%, by Weight, Natural or Synthetic Rubber)		730
Inorganic Zinc Coating		340
Low Activation Interior Coating		420
Mist Coating		610
Navigational Aids Coating		340
Nonskid Coating		340
Organic Zinc Coating		340
Pre-Treatment Wash Primer	420	420
Repair and Maintenance Thermoplastic Coating		340
Sealant for Wire-Sprayed Aluminum		610
Special Marking Coating		420
Specialty Coatings:		
Heat Resistant Coating	360	420
Metallic Heat Resistant Coating		530
High Temperature Coating		500

Tack Coating		610
Topcoats:		
Extreme High-Gloss Coating	420	490
High Gloss Coating	275	340
Underwater Weapons Systems Coating	275	340
Any Other Coating Type	275	340

(2) VOC Content of Pleasure Craft Coatings

Except as otherwise provided in this rule, a person shall not apply a pleasure craft coating within the SCAQMD jurisdiction with a VOC content in excess of the following limits shown in the Table of Standards II, expressed as grams of VOC per liter of coating, as applied, less water and less exempt solvents:

TABLE OF STANDARDS II

VOC LIMITS Less water and exempt compounds Grams per Liter (g/L)	
PLEASURE CRAFT COATING CATEGORY	CURRENT LIMIT
Antifoulant Coatings:	
Aluminum Substrate	560
Other Substrate	330
Clear Wood Coatings:	
Sealers	550
Varnishes	490
Primer Coatings:	
Finish Primer/Surfacer	420
High Build Primer/Surfacer	340
Marine Deck Sealant Primer	760
Pretreatment Wash Primer	780
Teak Primer	775
Topcoats:	
Extreme High Gloss Coating	490
High Gloss Coating	420
Any Other Coating Type	420

(3) VOC Content of Low-Solids Coatings

Except as otherwise provided in this rule, a person shall not apply a marine coating or a pleasure craft coating within the SCAQMD jurisdiction with a VOC content in excess of the following limit shown in the Table of Standards III, expressed as grams of VOC per material of coating, as applied:

TABLE OF STANDARDS III

VOC LIMIT – MARINE & PLEASURE CRAFT COATINGS Grams per liter of material VOC	
COATING CATEGORY	CURRENT LIMIT
Low-Solids Coating	120

(4) Most Restrictive VOC Limit

If any representation or information on the container of any coating subject to this rule, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature that indicates that the coating meets the definition of, is recommended for use or is suitable for use for more than one of the marine coating categories listed in paragraph (d)(1) or the pleasure craft coating categories listed in paragraph (d)(2), or the low-solids coating category listed in paragraph (d)(3), then the lowest VOC content limit shall apply.

(~~2~~5) Approved Emission Control System

~~(A) Owners and/or operators may comply with the provisions of paragraph (c)(1) by using an emission control system, which has been approved in writing by the Executive Officer, for reducing VOC emissions. The control system must achieve a minimum capture efficiency using USEPA, ARB, and District methods specified in subparagraph (e)(4)(A) and a destruction efficiency of at least 85 percent by weight, and,~~

~~(B) The approved system shall reduce the VOC emissions, when using non-compliant coatings, to an equivalent or greater level that would be achieved by the provisions in paragraph (c)(1).~~ A person may comply with the provisions of paragraphs (d)(1), (d)(2) or (d)(3), by using an approved emission control system, consisting of a collection and control device, provided such emission control system is approved pursuant to Rule 203 - Permit to Operate, in writing, by the Executive Officer for reducing emissions of VOC. The Executive Officer shall not approve such an emission control system unless the VOC emissions resulting from the use of non-compliant coatings will be reduced to a level equivalent to or lower than the limits specified in paragraphs (d)(1), (d)(2) or (d)(3), as applicable. The required efficiency of an emission

control system at which an equivalent or greater level of VOC reduction will be achieved shall be calculated by the following equation:

$$C.E. = \left[1 - \left\{ \frac{(VOC_{LWc})}{(VOC_{LWn,Max})} \times \frac{1 - (VOC_{LWn,Max}/D_{n,Max})}{1 - (VOC_{LWc}/D_c)} \right\} \right] \times 100\%$$

Where: C. E. = Control Efficiency, expressed as a percentage

VOC_{LWc} = VOC Limit of Rule 1106, less water and less exempt compounds, pursuant to subdivision (d).

$VOC_{LWn,Max}$ = Maximum VOC content of non-compliant coating used in conjunction with a control device, less water and less exempt compounds.

$D_{n,Max}$ = Density of solvent, reducer, or thinner contained in the non-compliant coating, containing the maximum VOC content of the multi-component coating.

D_c = Density of corresponding solvent, reducer, or thinner used in the compliant coating system = 880 g/L.

(~~3~~6) Alternative Emission Control Plan

~~Owners and/or operators may achieve compliance with the requirements~~A person may comply with the provisions of paragraphs (d)(1), (d)(2) and (d)(3) ~~paragraph (c)(1)~~ by means of an Alternative Emission Control Plan, pursuant to Rule 108 - Alternative Emissions Control Plans.

(7) Exempt Compounds

A person shall not manufacture, sell, offer for sale, distribute for use in the SCAQMD jurisdiction, or apply any marine or pleasure craft coating which contains any Group II Exempt Compounds listed in Rule 102 - Definition of Terms, in quantities greater than 0.1 percent by weight. Cyclic, branched, or linear, completely methylated siloxanes (VMS) are not subject to this provision.

(8) Carcinogenic Materials

A person shall not manufacture, sell, offer for sale, distribute for use in the SCAQMD jurisdiction, or apply any marine or pleasure craft coating which contains cadmium, nickel, lead or hexavalent chromium that was introduced as a pigment or as an agent to impart any property or characteristic to the marine or

pleasure craft coatings during manufacturing, distribution, or use of the applicable marine or pleasure craft coatings.

(9) Application Equipment Transfer Efficiency

(A) A person shall not apply any marine coating or pleasure craft coating unless one of the following methods of coating transfer is used:

(i) Electrostatic application, or

(ii) High-volume, low-pressure (HVLP) spray, or

(iii) Brush, dip, or roller, or

(iv) Spray gun application, provided the owner or operator demonstrates that the spray gun meets the HVLP definition in paragraph (c)(19) in design and use. A satisfactory demonstration must be based on the manufacturer's published technical material on the design of the spray gun and by a demonstration of the operation of the spray gun using an air pressure tip gauge from the manufacturer of the spray gun.

(v) Any such other marine coating or pleasure craft coating application methods as demonstrated, in accordance with the provisions of paragraph (h)(6), to be capable of achieving equivalent or better transfer efficiency than the marine coating or pleasure craft coating application method listed in clause (d)(9)(A)(ii), provided written approval is obtained from the Executive Officer prior to use.

(B) A person shall not apply any marine coating or pleasure craft coating by any of the methods listed in subparagraph (d)(9)(A) unless such coating is applied with properly operating equipment, operated according to procedures recommended by the manufacturer and in compliance with applicable permit conditions, if any.

(~~4~~10) Solvent Cleaning. ~~Operations;~~ Storage and Disposal of VOC-containing Materials

~~All solvent~~Solvent cleaning ~~operations~~ of application equipment, parts, products, tools, machinery, equipment, general work areas, and the storage and disposal of VOC-containing materials used in solvent cleaning ~~operations~~ activities shall be carried out pursuant to SCAQMD Rule 1171 - Solvent Cleaning Operations.

~~(5) Recordkeeping~~

~~Notwithstanding the provisions of subdivision (g), records shall be maintained pursuant to Rule 109.~~

~~(d) Prohibition of Specification~~

~~(1) A person shall not solicit or require any other person to use, in the district, any coating or combination of coatings to be applied to any marine vessel or marine component subject to the provisions of this rule that does not meet the limits requirements of this rule or of an Alternative Emission Control Plan approved pursuant to the provisions of paragraph (c)(3) of this rule.~~

~~(2) The requirements of paragraph (d)(1) shall apply to all written or oral agreements executed or entered into after November 4, 1988.~~

(e) Prohibition of Possession, Specification and Sale

(1) For the purpose of this rule, no person shall store at a worksite any marine coating or pleasure craft coating subject to this rule within the SCAQMD jurisdiction that is not in compliance with the requirements shown in the Tables of Standards of paragraphs (d)(1), (d)(2), and (d)(3) unless one or more of the following conditions apply:

(A) The marine or pleasure craft coating is for use at a facility that utilizes an approved emission control device pursuant to paragraph (d)(5) and the coating meets the limits specified in permit conditions.

(B) The marine or pleasure craft coating is for use at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to paragraph (d)(6), and the marine or pleasure craft coating is specified in the plan.

(2) For the purpose of this rule, no person shall solicit from, specify, or require any other person to use in the SCAQMD jurisdiction any marine or pleasure craft coating that does not meet the following:

(A) Applicable VOC limits required by paragraph (d)(1), (d)(2) or (d)(3) for the specific application unless:

(i) The marine or pleasure craft coating is located at a facility that utilizes an approved emission control device pursuant to paragraph (d)(5), and the marine or pleasure craft coating meets the limits specified in permit conditions; or,

(ii) The marine or pleasure craft coating is located at a facility that operates in compliance with an approved Alternative Emissions

Control Plan pursuant to paragraph (d)(6), and the marine or pleasure craft coating is specified in the plan.

(B) The requirements of paragraphs (d)(7) and (d)(8).

(3) For the purpose of this rule, no person shall supply, sell, offer for sale, market, blend, package, repackage or distribute any marine or pleasure craft coating for use within the SCAQMD jurisdiction subject to the provisions in this rule that does not meet the:

(A) Applicable VOC limits required by paragraphs (d)(1), (d)(2) and (d)(3) for the specific application, unless:

(i) The marine or pleasure craft coating is for use at a facility that utilizes an approved emission control device pursuant to paragraph (d)(5), and the coating meets the limits specified in permit conditions; or,

(ii) The marine or pleasure craft coating is for use at a facility that operates in accordance with an approved Alternative Emissions Control Plan pursuant to paragraph (d)(6), and the marine or pleasure craft coating is specified in the plan; and,

(B) The requirements of paragraphs (d)(7) and (d)(8).

(4) For the purpose of this rule, no person shall solicit from, specify, require, offer for sale, sell, or distribute to any other person for use in the SCAQMD jurisdiction any marine or pleasure craft coating application equipment that does not meet the requirements of subparagraph (d)(9)(A).

(5) For the purpose of this rule, no person shall offer for sale, sell, supply, market, offer for sale or distribute an HVLP spray gun for use within the SCAQMD unless said person provides accurate information to the spray gun recipient. Such accurate information shall include the maximum inlet air pressure to the spray gun that would result in a maximum air pressure of 10 pounds per square inch gauge (psig) air pressure, measured dynamically at the center of the air cap and at the air horns, based on the manufacturer's published technical material on the design of the spray application equipment, and by a demonstration of the operation of the spray application equipment using an air pressure tip gauge from the manufacturer of the gun. The information shall either be permanently marked on the gun, or provided on the company's letterhead or in the form of technical literature that clearly identifies the spray gun manufacturer, the seller, or the distributor.

(6) Paragraphs (d)(1), (d)(2) and (d)(3) shall not apply to marine coatings or pleasure craft coatings that are sold, offered for sale, or solicited, for shipment or use outside of the SCAQMD jurisdiction, or for shipment to other manufacturers for repackaging provided such coatings are sold, offered for sale, or solicited, for shipment or use outside the SCAQMD jurisdiction.

(f) Recordkeeping Requirements

(1) Recordkeeping for VOC Emissions

Records of marine coating usage and pleasure craft coating usage, as applicable, shall be maintained pursuant to SCAQMD Rule 109 - Recordkeeping for Volatile Organic Compound Emissions, and shall be made available to the Executive Officer upon request. The records shall also include the following information:

(A) Material name and manufacturer;

(B) Application method;

(C) Marine coating and pleasure craft coating categories, as applicable, and mix ratio specific to the coating;

(D) Regulatory VOC, for the marine coating and pleasure craft coating, as applicable;

(E) Documentation such as manufacturer specification sheets, material safety data sheets, technical data sheets, or any other air quality data sheets that indicate the material is intended for use as a marine coating, pleasure craft coating or solvent, as applicable;

(F) Current manufacturer specification sheets, material safety data sheets, or technical data sheets, that list the actual VOC and regulatory VOC, for each marine and pleasure craft coating, as applicable; and,

(2) Recordkeeping Requirements for Emission Control System

Any person using an emission control system shall maintain daily records of key system operating parameters that demonstrate continuous operation and compliance of the emission control system during periods of VOC emission producing activities. "Key system operating parameters" are those parameters necessary to ensure or document compliance with subparagraph (h)(7)(A), including, but not limited to, temperatures, pressure drops, and air flow rates. These records shall be made available to the Executive Officer upon request.

(g) Administrative Requirements for Marine and Pleasure Craft Coating Manufacturers

(1) Labeling Requirements

(A) The manufacturer of marine coatings and pleasure craft coatings or marine coating and pleasure craft coating components shall include on all containers the regulatory VOC content (in grams of VOC per liter of coating less water and exempt compounds).

(~~e~~h) Test Methods

(1) Determination of VOC Content:

The VOC content of coatings, subject to the provisions of this rule shall be determined by the following methods:

(A) ~~United States Environmental Protection Agency (~~U.S. EPA~~)~~ Reference Test Method 24 (Determination of Volatile Matter Content, Water Content, Volume Solids and Weight Solids of Surface Coatings, Code of Federal Regulations, Title 40, Part 60, Appendix A~~,~~). The exempt compounds' content shall be determined by SCAQMD Laboratory Test Method 303 (Determination of Exempt Compounds) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual; or,

(B) SCAQMD Method 304 [Determination of Volatile Organic Compounds (VOCs) in Various Materials] contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual~~.~~; or,

(C) SCAQMD Method 313 [Determination of Volatile Organic Compounds VOC by Gas Chromatography-Mass Spectrometry] in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual.

(2) VOC content determined to exceed the limits established by this rule through the use of any of the above-referenced test methods shall constitute a violation of this rule.

~~(C~~3~~)~~ Exempt Perfluorocarbon Compounds

The following classes of compounds:

C~~e~~yclic, branched, or linear, completely fluorinated alkanes;

C~~e~~yclic, branched, or linear, completely fluorinated ethers with no unsaturations;

C~~e~~yclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

S~~s~~ulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,

~~will~~ shall be analyzed as exempt compounds for compliance with subdivision (~~c~~d), only ~~when~~ at such time as manufacturers specify which individual compounds are used in the ~~coating~~ formulation of the coatings subject to this rule. In addition, prior to any such analysis, the manufacturers shall also identify the test methods approved by the U.S. EPA, California Air Resources Board (CARB), and the SCAQMD ~~approved test methods~~ that will be used to quantify the amount of each exempt compound.

(~~2~~4) Determination of ~~Metal Content~~Iridescent Particles in Metallic/Iridescent Coatings

The metal and silicon content in metallic/iridescent coatings subject to the provisions of this rule shall be determined by the SCAQMD Method 311 (Determination ~~Analysis~~ of Percent Metal in Metallic Coatings by Spectrographic Method) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.

(~~3~~5) Determination of Acid Content in Marine and Pleasure Craft Coatings

The acid content of any coating subject to the provisions of this rule shall be determined by ASTM D-1613-~~85~~ 06 (2012) (Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint~~.~~, Varnish, Lacquer, and Related Products) ~~contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual~~.

(6) Determination of Transfer Efficiency of Application Equipment

The transfer efficiency of alternative marine coating and pleasure craft coating application methods, as defined by clause (d)(9)(A)(v), shall be determined in accordance with the SCAQMD method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989," and SCAQMD "Guidelines for Demonstrating Equivalency With SCAQMD Approved Transfer Efficiency Spray Gun September 26, 2002."

(~~4~~7) Determination of Efficiency of Emission Control System

(A) The efficiency of the collection device of the emission control system as specified in paragraph ~~(c)(2)~~(d)(5) shall be determined by the ~~USEPA~~ methods specified ~~cited in 55 Federal Register 26865 (June 29, 1990), or any other method approved by the USEPA, the California Air Resources Board, and the SCAQMD~~ below:

(i) U.S. EPA method cited in 55 Federal Register (FR) 26865, June 29, 1990; or

(ii) SCAQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency;" or

(iii) Any other method approved by the U.S. EPA, CARB, and the SCAQMD Executive Officer.

(B) The efficiency of the control device of the emission control system as specified in paragraph (~~c~~d)(~~2~~5) and the VOC content in the control device exhaust gases, measured and calculated as carbon, shall be determined by U.S. EPA Test Methods 25, 25A, or SCAQMD Method 25.1 (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) as applicable. U.S. EPA Test Method 18, or CARB Method 422 shall be used to determine emissions of exempt compounds.

(~~5~~8) Multiple Test Methods

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

(~~6~~9) All test methods referenced in this section shall be the most recently approved version.

(~~f~~i) Rule 442 Applicability

Any ~~marine coating operation~~Marine Coating or Pleasure Craft Coating or any facility ~~which~~ that is exempt pursuant to subdivision (j) from all or a portion of the VOC limits of subdivision (d) ~~this rule~~ shall comply with the provisions of Rule 442 - Usage of Solvents.

(~~g~~j) Exemptions

The provisions of this rule shall not apply to:

(1) Marine or pleasure craft coatings that have a VOC content of no more than 10 g/L or its equivalent, less water and less exempt compounds, as applied.

(~~1~~2) ~~marine~~Marine coatings applied to interior surfaces of potable water containers.

(~~2~~3) ~~touch~~Touch-up coatings, as defined by paragraph (c)(41) of this rule.

~~(3) marine coatings purchased before January 1, l992, in containers of one quart or less and applied to pleasure craft.~~

~~(4) antifoulant coatings applied to aluminum hulls.~~

(~~5~~4) Any aerosol coating product~~s~~.

(5) The provisions of paragraph (d)(9) shall not apply to marine or pleasure craft coatings with a viscosity of 650 centipoise or greater, as applied.

(6) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to marine coatings that are used for vessels that are intended to submerge to at least 500 feet below the surface of the water provided that the total combined usage of such coatings does not exceed 12 gallons per calendar year and such coatings are in compliance with the VOC limits in the U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for Shipbuilding and Ship Repair (Surface Coatings).