

Proposed Amended Rule (PAR) 1106 Marine and Pleasure Craft Coatings

Working Group Meeting #2
March 19, 2026



Join Zoom Webinar Meeting

<https://aqmd.zoomgov.com/j/1603282546>

Teleconference Dial-In: 1-669-254-5252

Webinar Meeting ID: 160 328 2546



Discussion Topics

Initial VOC Rule Development Meeting Recap


Rule 1106 Background

Manufacturer Survey Summary

Initial Rule Concepts

Key Considerations

Next Steps

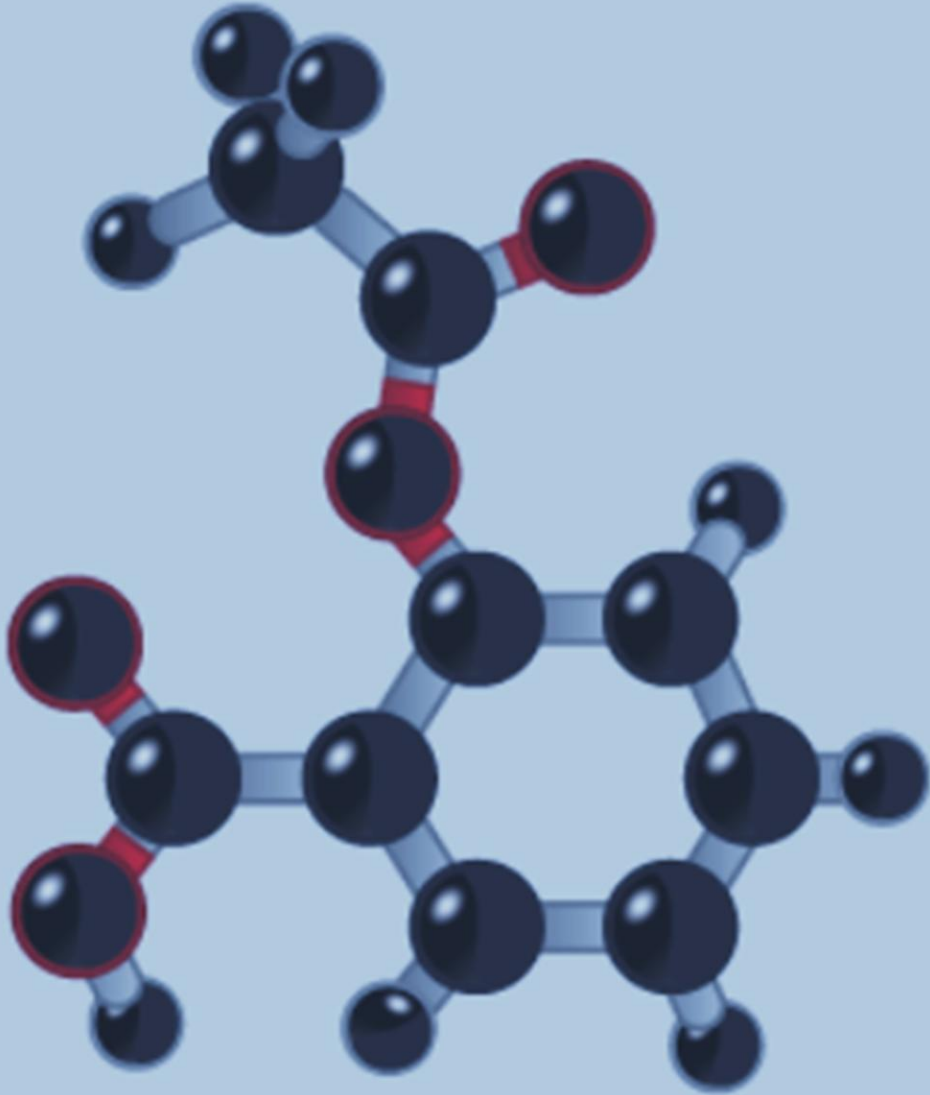


Initial VOC Rule Development Meeting Recap and Exempt Compound Background

Summary of Initial VOC Rule Development Meeting

- Initial VOC rule development kick-off meeting held August 12, 2025
 - Staff discussed the following topics:
 - Upcoming rule development and process overview
 - Background on para-Chlorobenzotrifluoride (pCBtF, also known as Oxsol) and *tert*-Butyl Acetate (t-BAc)
 - Potential phase-out concepts and considerations including alternative Maximum Incremental Reactivity (MIR)
 - Manufacturer Survey distributed on August 22, 2025
- **Rule 1106** – Marine and Pleasure Craft Coatings
 - **Rule 1113** – Architectural Coatings
 - **Rule 1122** – Solvent Degreasers
 - **Rule 1125** – Metal Container, Closure, and Coil Coating Operations
 - **Rule 1126** – Magnet Wire Coating Operations
 - **Rule 1128** – Paper, Fabric, and Film Coating Operations
 - **Rule 1130** – Graphic Arts
 - **Rule 1130.1** – Screen Printing Operations
 - **Rule 1143** – Consumer Paint Thinners & Multi-Purpose Solvents
 - **Rule 1144** – Metalworking Fluids and Direct-Contact Lubricants
 - **Rule 1145** – Plastic, Rubber, Leather, and Glass Coatings
 - **Rule 1162** – Polyester Resin Operations

Exempt Compounds



- Certain solvents are defined as exempt from the definition of a VOC by the U.S. EPA if they are negligibly photochemically reactive
 - Defined as less reactive than ethane
- Exempt compounds do not contribute to the VOC content of regulated materials
- U.S. EPA does not consider toxicity when making their designation

South Coast AQMD's Defined Exempt Compounds

- South Coast AQMD considers compounds designated as exempt by the U.S. EPA but also considers the toxicity, ozone depletion potential, or other environmental impacts
- Rule 102 – Definition of Terms, classifies exempt compounds into two groups
 - Group I: exempt compounds that are not expected to be restricted in the future
 - Group II: exempt compounds that are prohibited from use in many VOC rules because of toxicity or other environmental impacts
- South Coast AQMD sometimes includes limited exemption in source specific rules to address potential toxicity concerns

Rule 102 (Cont.)

(Amended January 10, 2020)

(B) Group II

methylene chloride (dichloromethane)
1,1,1-trichloroethane (methyl chloroform)
trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
cyclic, branched, or linear, completely methylated siloxanes (VMS)
tetrachloroethylene (perchloroethylene)
ethylfluoride (HFC-161)
1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
1,1,2,2,3-pentafluoropropane (HFC-245ca)
1,1,2,3,3-pentafluoropropane (HFC-245ea)
1,1,1,2,3-pentafluoropropane (HFC-245eb)
1,1,1,3,3-pentafluoropropane (HFC-245fa)
1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
1,1,1,3,3-pentafluorobutane (HFC-365mfc)
chlorofluoromethane (HCFC-31)
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
1 chloro-1-fluoroethane (HCFC-151a)

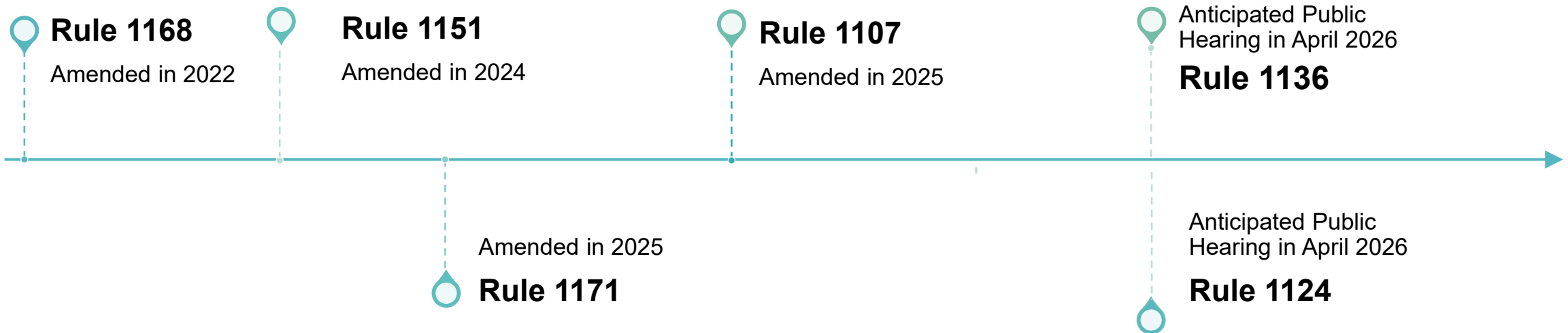
The use of Group II compounds and/or carbon tetrachloride may be restricted in the future because they are either toxic, potentially toxic, upper-atmosphere ozone depleters, or cause other environmental impacts. By January 1, 1996, chlorofluorocarbons (CFC), 1,1,1-trichloroethane (methyl chloroform), and carbon

pCBtF and t-BAc Regulatory Background



1994 -1995	U.S. EPA and South Coast AQMD exempted pCBtF as a VOC due to low photochemical reactivity
2004 - 2006	U.S. EPA exempted t-BAc as a VOC, South Coast AQMD included limited exemptions
2015	California Office of Environmental Health Hazard Assessment (OEHHA) draft health risk assessment showed t-BAc as potential carcinogen
2017	South Coast AQMD Stationary Source Committee directed staff to prioritize lowering toxicity over emission reductions
2018	OEHHA finalized t-BAc Inhalation Cancer Potency Factor, concluding that t-BAc poses potential cancer risk to humans, South Coast AQMD requested OEHHA evaluate toxicity of pCBtF
2020	OEHHA finalized pCBtF Inhalation Cancer Potency Factor, concluding pCBtF poses greater cancer risk to humans than t-BAc
2022 – Present	Staff has been systematically amending rules to address pCBtF and t-BAc use

Rule Amendments to Address pCBtF and t-BAc



- **Rule 1168 – Adhesive and Sealant Applications**
- **Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations**
- **Rule 1171 – Solvent Cleaning Operations**
- **Rule 1107 – Coating of Metal Parts and Products**
- **Rule 1124 – Aerospace Assembly and Component Manufacturing Operations**
- **Rule 1136 – Wood Products Coatings**

pCBtF and t-BAc Phase-Out Approaches

Approach being considered for PAR 1106

▶▶ Swift Prohibition

Temporarily raise limits and quickly prohibit pCBtF and t-BAc

Used when higher-VOC materials without pCBtF and t-BAc are readily available

🕒 Future Prohibition

Allow time for reformulation with future phase out date

Used when higher-VOC materials without pCBtF and t-BAc are not available

🏭 Require Control Equipment

Air pollution control technology to reduce public exposure levels

When reformulation is not feasible



Rule 1106 – Marine and Pleasure Craft Coatings Background

Rule 1106 Background

Current Rule 1106 originally separated into two rules:

Rule 1106 – Marine Applications
(adopted November 1988)

Rule 1106.1 – Pleasure Crafts
(adopted May 1992)

2019 Amendment

Combined contents of Rule 1106.1 with Rule 1106

2023 Amendment

Addressed U.S. EPA SIP disapproval by removing reference to
ASTM D7767-11



Rule 1106 Applicability

- Applicable to manufacturers, sellers, suppliers, and users of coatings used for:
 - **Marine Application:** Boats, ships, and vessels, their appurtenances, and structures such as piers, docks, buoys, and oil drilling rigs intended for the exposure to marine or freshwater environment
 - **Pleasure Craft Application:** Marine or freshwater vessels less than 20 meters and manufactured or operated primarily for recreational purposes, or are leased, rented, or chartered to a person or business for recreational purposes



Rule 1106 Requirements

- Rule 1106 establishes VOC content limits for marine coatings and pleasure craft coatings, coating application restrictions, and recordkeeping requirements
- VOC content limits are separated into three tables:
 - **Table 1 – Marine Coatings**
 - **Table 2 – Pleasure Craft Coatings**
 - **Table 3 – Low-Solids Coatings**
(applies to marine and pleasure craft)
- Table 1 includes separate limits for marine coatings cured at a temperature at or above 194°F (90°C)

VOC LIMITS Less water and exempt compounds Grams per Liter (g/L)	
PLEASURE CRAFT COATING CATEGORY	CURREN 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

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
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
High Temperature Coating		500
Tack Coating		610
Topcoats:		
Extreme High-Gloss Coating	420	490
High Gloss Coating	275	340
Undersea Weapons Systems Coating	275	340
Any Other Coating Type	275	340

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

Rule 1106 Progress Since Initial VOC Meeting

Followed up and met with coating manufacturers

Conducted site visits to coating operations

Distributed and received coatings survey from manufacturers

Analyzed and evaluated marine coating data



Manufacturer Survey Summary

Manufacturer Survey Summary

Manufacturer survey distributed to manufacturers on August 22, 2025

Information will assist in:

- Developing feasible phase-out timeline for pCBtF and t-BAc
- Assessing if VOC emission reductions are feasible

Requested information included:

- Coating type and category
- pCBtF and t-BAc content (wt %)
- VOC content
- PW-MIR (optional)

Each coating type and category for:

- Extent of pCBtF and t-BAc use
- Share of marine and pleasure craft coating market that contains pCBtF and t-BAc
- Reliance on pCBtF and t-BAc to comply with existing VOC limits
- Typical VOC content ranges



Survey Data Summary

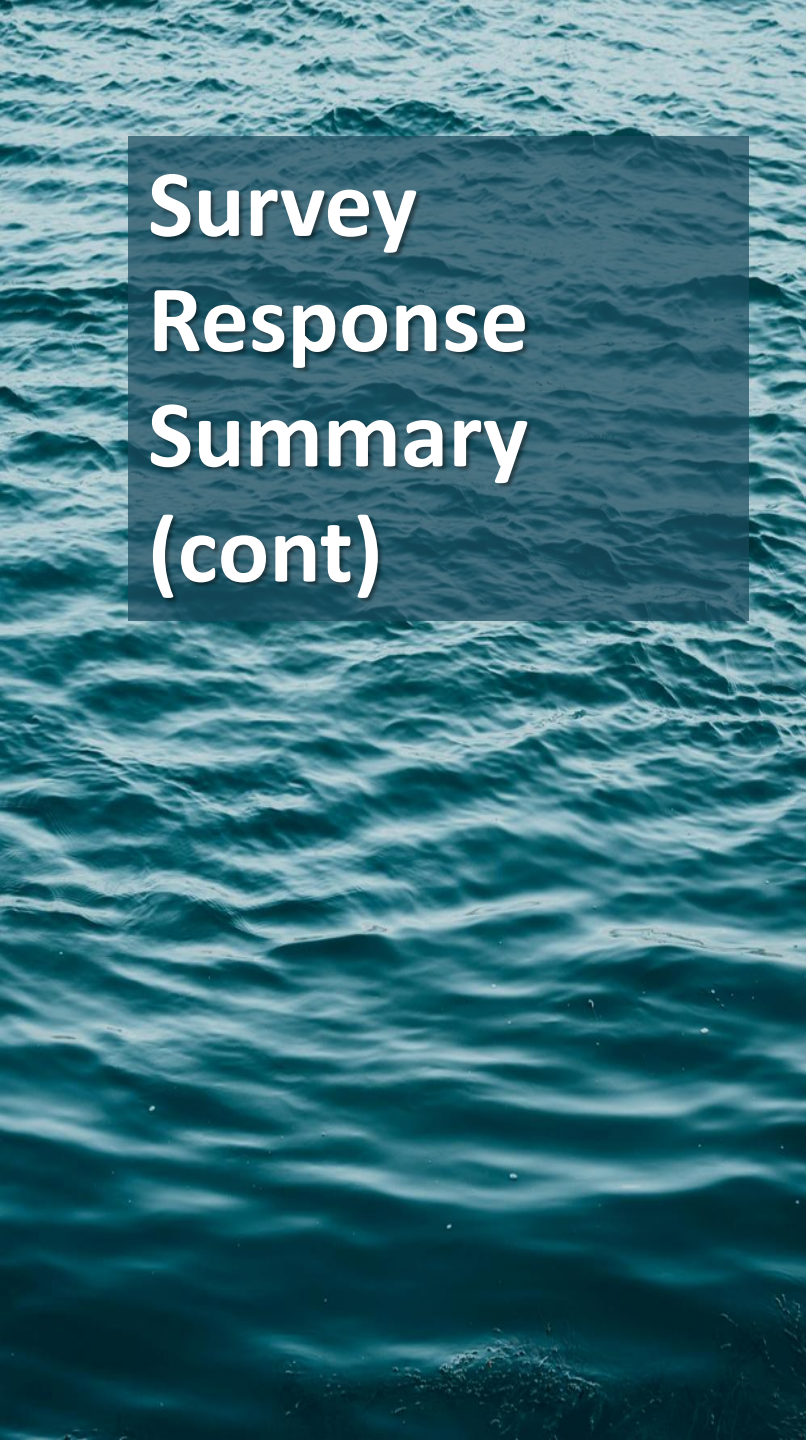
Staff received less than five survey responses

Marine and pleasure craft coatings sold into South Coast AQMD:

- ~39% contain pCBtF
- ~14% contain t-BAC
- ~3% contain both pCBtF and t-BAC
- ~44% do not contain pCBtF or t-BAC

Percentages based on number of products reported, *not* sales weighted averages

More information would be helpful to provide more clear representation of coating sales



Survey Response Summary (cont)

Majority of reported products reported as
Pleasure Craft coatings

Only seven total coating categories reported:

- Antifoulant coatings formulated for aluminum substrates
- Antifoulant coatings formulated for non-aluminum substrates
- Finish primer surfacers
- High-build primer surfacers
- Marine deck sealant primers
 - Only one reported
- High-gloss topcoats
- Clear wood coatings (varnishes)

Antifoulant Coatings

- Antifoulants prevent or reduce biological attachment on underwater portion of ship and registered pesticide with U.S. EPA
- Industry publications indicate that antifoulant coatings compose largest portion of the marine and pleasure craft coatings market
- **Non-Aluminum Substrates antifoulants are large majority of reported antifoulant coatings, for all substrate applications**
 - Marine VOC content limit: 400 g/L
 - Pleasure Craft VOC content limit: 330 g/L
 - All reported for pleasure craft application
 - Reported products VOC content range: 300 – 330 g/L
 - 100% **reported** contain either pCBtF or t-BAc
 - Reported pCBtF contents <11% by wt
 - Reported t-BAc contents <3% by wt





Antifoulant Coatings (cont)

- **Formulated for application to Aluminum Substrates:**
 - VOC content limit: 560 g/L
 - For **both** marine and pleasure craft use
 - VOC content of reported products ranged from 374 – 379 g/L
 - **100% reported** contain t-BAC
 - Reported t-BAC contents <7% by wt
 - t-BAC is **not** considered an exempt for Rule 1106 coatings
 - **None reported** contain pCBtF
 - Do **not** appear to rely on pCBtF to comply with applicable VOC limits

Primers

- **Finish Primer Surfacers and High-Build Primer Surfacers were main primers reported**
 - One marine deck sealant primer reported
- Majority of primers reported for pleasure craft application
 - Almost all Finish Primer Surfacers reported contain pCBtF
 - Small number reported contain t-BAc, and both t-BAc and pCBtF
 - No reported High-Build Primer Surfacers contain pCBtF or t-BAc
- Unclear whether primer subcategories depend on pCBtF to comply with applicable VOC limits





Primers (cont)

- Currently no established marine coating categories for primers
 - Fall under “Any Other Coating Type” category, with VOC limit of 340 g/L
- All reported primers for marine application contain pCBtF, none contain t-BAC
 - <10% by wt pCBtF
 - Avg. VOC content of 250 g/L
 - Do not appear to rely on pCBtF to comply with applicable VOC limit

Topcoats – High-Gloss Coatings

High Gloss Coatings are third-most reported coating category

Majority reported as pleasure craft coatings

- VOC limit for pleasure craft use: 420 g/L
- Reported VOC contents ranged from 369 to 412 g/L
- All reported for pleasure craft application did not contain pCBtF or t-BAC
- Do not appear to rely on pCBtF to comply with VOC limit

Those reported as marine coatings all contained pCBtF

- VOC limit for marine use: 340 g/L
- Reported VOC contents at 340 g/L
- Reported pCBtF contents <11% by wt
- Appear to rely on pCBtF rely to comply with VOC limit

Clear Wood Coatings - Varnishes

- All reported Clear Wood Coatings reported as Varnishes and reported for pleasure craft use
 - VOC limit: 490 g/L
 - None contain pCBtF or t-BAC
 - Highest **reported** VOC content: <420 g/L
 - Do not appear to rely on pCBtF to comply with applicable VOC limit
 - Potential for reduction in VOC limit



Staff Conclusions

Only seven of thirty established coating categories and subcategories reported

More information would be helpful to provide more clear representation of the marine and pleasure craft coatings market in South Coast AQMD

Based on the data provided:

- Potential for VOC limit decrease for antifoulant coatings formulated for aluminum substrates used for both marine and pleasure craft application
- Potential for VOC limit decrease for clear wood coatings (varnishes) used for pleasure craft application
- Reported coatings not heavily reliant on pCBtF to comply with applicable VOC limits

Staff has reached out to coating manufacturers to request more information and to meet and discuss rule concepts, coating background, reformulation needs and more

Initial Rule Concepts

Key Rule Amendment Objectives



Prohibition of *para*-Chlorobenzotrifluoride (pCBtF) and *tert*-Butyl Acetate (t-BAc)



Lower VOC Emissions where feasible

Initial Rule Concepts

- Initial Preliminary Draft Rule was distributed for discussion purposes
- Initial rule concepts can change as more information is gathered
- Initial new proposed rule concepts include:
 - New proposed definitions
 - Removed outdated and unused definitions
 - New marine coating categories
 - New recordkeeping and labeling requirements
 - pCBtF and t-BAc prohibition timeline

Initial Preliminary Draft Proposed Amended Rule 1106 – for discussion purposes only

(Adopted November 4, 1988)(Amended May 5, 1989)(Amended June 2, 1989)
(Amended March 2, 1990)(Amended November 2, 1990)(Amended December 7, 1990)
(Amended August 2, 1991)(Amended January 13, 1995)
(Amended May 3, 2019)(Amended January 6, 2023)
(Amended [DATE OF RULE ADOPTION])
Revision Date 03/13/2026

[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]

PROPOSED AMENDED RULE 1106. MARINE AND PLEASURE CRAFT COATINGS

- (a) Purpose
The purpose of this rule is to reduce ~~emissions of~~ Volatile Organic Compounds (VOC) and toxic emissions from Marine and Pleasure Craft Coatings.
- (b) Applicability
This rule is applicable to any ~~person~~ Person who supplies, sells, offers for sale, markets, manufactures, blends, packages, repackages, possesses or distributes any Marine or Pleasure Craft Coating and any associated solvent used with a Marine or Pleasure Craft Coating for use within the South Coast AQMD ~~Jurisdiction~~ jurisdiction, as well as any ~~person~~ Person who applies, stores at a worksite, or solicits the application of any Marine or Pleasure Craft Coating and any associated solvent used with a Marine or Pleasure Craft Coating within the South Coast AQMD ~~Jurisdiction~~ jurisdiction.
- (c) Definitions

Definitions

- Staff is evaluating definitions to:
 - Determine if additional definitions are needed
 - Remove unused and unneeded definitions
 - Determine if existing definitions need revising
- Some definitions are also used in U.S. EPA CTG
 - Would like to discuss potentially clarifying definitions
- Staff is seeking stakeholder input and open to meeting to discuss further

(c) Definitions

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

- (1) AEROSOL COATING PRODUCT ~~means~~is a pressurized coating product containing pigments, resins, and/or other coating solids that dispenses product ingredients by means of a propellant, and is packaged in a disposable aerosol container 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 degrees Celsius (°C) (194 degrees Fahrenheit (°F)).
- (3) ANTENNA COATING is any coating applied to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

1106 - 1

Definitions

High Gloss Coating and Extreme High Gloss Coating

- Staff would like to align units of measurement in definitions with similar coatings defined using the same test method

Rule 1106

(10) EXTREME HIGH GLOSS COATING is any coating that achieves at least registers a gloss of 95 or greater percent reflectance on a 60 degree (°) meter when tested by according to ASTM Test Method D-523-14 “~~Standard Test Method for Specular Gloss~~” (ASTM Test Method D-523).

(15) HIGH GLOSS COATING is any coating that achieves at least registers a gloss of 85 percent reflectance or greater on a 60° degree meter when tested by according to ASTM Method D-523-14 “~~Standard Test Method for Specular Gloss~~”.

Rule 1151

(16) GLOSS CLEAR COATING means any Automotive Coating that is formulated with materials that do not impart color, is specifically labeled and formulated for application over a Color Coating or a previous layer of a Clear Coating, and that registers a gloss of 70 units or greater on a 60-degree meter, according to ASTM Test Method D523 – Specular Gloss (ASTM Test Method D523).

Rule 1113

(43) NONFLAT COATINGS are coatings that register a gloss of 5 or greater on a 60 degree meter and a gloss of 15 or greater on an 85 degree meter according to ASTM Test Method D 523.

Definitions

- Considering consolidating into a single Primer Surfacer definition and category
 - Only difference between High-Build Primer Surfacer and Finish Primer Surfacer is applied wet film thickness and VOC limit
 - Challenging to enforce
 - Some product data sheets recommend application thickness that spans defined thickness ranges

VOC LIMITS	
Less water and exempt compounds Exempt Compounds Grams per Liter (g/L)	
PLEASURE CRAFT COATING CATEGORY Pleasure Craft Coating Category	CURRENT LIMIT Regulatory VOC Content Limit (g/L- Coating)
Antifoulant Coatings:	
Aluminum Substrate	560
Other Substrate	330
Clear Wood Coatings:	
Sealers	550
Varnishes	490
Primers/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

(11) 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.

(17) 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 ~~tepecoat~~ 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.

Definitions

- Staff considering integrating CTG definition for “ship”, which could be defined as “**Marine Vessel**”
- Staff also considering removing size threshold from pleasure craft definition
 - Currently only applies to pleasure craft under 20 meters in length
 - For Rule 1106, unclear how coatings used on pleasure craft vessels longer than 20 meters are regulated
 - Currently no defined term in Rule 1106 that these vessels would fall under
- For CTG, pleasure craft over 20 meters appears to be unregulated

Definitions from CTG

Pleasure craft means any marine or fresh-water vessel used by individuals for noncommercial, nonmilitary, and recreational purposes that is less than 20 meters in length. A vessel rented exclusively to, or chartered for, individuals for such purposes shall be considered a pleasure craft.

Ship means any marine or fresh-water vessel used for military or commercial operations, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys). This definition includes, but is not limited to, all military and Coast Guard vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. Pleasure craft and offshore oil and gas drilling platforms are not considered ships.

Shipbuilding and ship repair operations means any building, repair, repainting, converting, or alteration of ships.

Definitions

Pretreatment Wash Primer

- Staff would like to standardize between rules unless there is a reason to be different
 - Include a percent solids by weight threshold
 - Mirror labeling and formulation language used

Rule 1106

(30) PRETREATMENT WASH PRIMER is a coating that contains a minimum of ~~1/20.5~~ percent acid, by weight, applied directly to bare metal surfaces to provide necessary surface etching.

Rule 1107

(47) PRETREATMENT COATING is a Coating which contains no more than 12 percent solids by weight, and at least 1/2-percent acid by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

Rule 1151

(24) PRETREATMENT WASH PRIMER means any Automotive Coating that contains a minimum of 0.5 percent acid by weight and not more than 16 percent solids by weight, is necessary to provide surface etching, and that is specifically labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.

Rule 1113

(48) PRE-TREATMENT WASH PRIMERS are coatings which contain a minimum of 0.5 percent acid, by weight, applied directly to bare metal surfaces to provide necessary surface etching.

Definitions

- **Sealant for Wire-Sprayed Aluminum and Wire-Sprayed Aluminum**

- Are these used and if so, how commonly?
- Are they all epoxy chemistries?
- How are they used? (“reduced with equal part solvent”)
- What is a molten multi-aluminum coating?

([3239](#)) 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 that is reduced for application with an equal part of an appropriate solvent (e.g., naphtha or ethylene glycol monoethyl ether).

([4452](#)) WIRE-SPRAYED ALUMINUM is any molten multi-aluminum coating applied to a steel substrate using oxygen fueled combustion spray equipment.

Definitions

(3645) TACK COAT is an epoxy coating of up to two mils (~~one mil = 0.001 of an inch~~) thick applied to an existing epoxy coating that has aged beyond the time limit specified by the manufacturer.

- **Tack Coating**

- Are these used and if so, how commonly?
- How are they used, and what for?
- Are they all epoxy chemistries?
- Is the “of up to two mils thick” wet film thickness?
- Considering rewording definition for clarity

Definitions

• Touch-Up Coating

- Considering removing definition and revising the associated exemption to narrow and mirror a similar exemption in Rule 1151, which limits the container size of coatings used in *spot repairs* to 0.5 fl ounces or smaller
 - Area used in definition and container size limit to be determined and adjusted to suit marine and pleasure craft industry
- Considering replacing definition with “**Spot Repair**”, defining the activity rather than the coatings

Rule 1106 (current)

(39) TOUCH-UP COATING is any coating applied incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to use.

Proposed

(44) SPOT REPAIR is any recoating of a previously coated surface area on a Marine Vessel or Pleasure Craft, of one square foot (929 square centimeters) or less, necessary to cover minor imperfections or minor mechanical damage incurred prior to use.

Definitions

(37) REDUCER OR THINNER is any solvent specifically labeled and formulated to reduce the viscosity of coatings.

- Added a definition for **Reducers and Thinners**
 - Staff considering adding Product-Weighted Maximum Incremental Reactivity (PW-MIR) limits for reducers or thinners
 - Would be similar to those in Rule 1151
 - Automotive industry not able to use certain solvents in reducers or thinners while meeting OEM coating specifications

Table 2– PW-MIR VOC Content Limit and Effective Date for Reducers and Thinners

	PW-MIR VOC Limit (g O₃/g VOC)	Effective Date
Reducer and Thinner	1.50	1/1/2030

Marine Coating Categories

- Added **Primer** marine coating category and subcategories into Table 1
- Currently, primers intended for marine use fall under the “Any Other Coating Type” category
- Table 2 contains a primer category and subcategories for primers intended for pleasure craft application
 - VOC limits differ from the “Any Other Coating Type” 340 g/L VOC limit
- Addition of primer category and subcategories into Table 1 would reduce confusion regarding applicable VOC limits for primers
- Considering collapsing the Antifoulant Coating subcategories into a single Antifoulant category, with a VOC content limit of **400 g/L**



Table 1 – Table of Standards for Marine Coatings **TABLE OF STANDARDS I**

MARINE COATING CATEGORY Marine Coating Category	Regulatory VOC Content Limits (g/L-Coating) VOC LIMITS Less water and exempt compounds Grams per Liter (g/L)	
	BAKED Baked Coatings CURRENT LIMIT	AIR DRIED Air Dried Coatings CURRENT LIMIT
	Antenna Coating	
Antifoulant Coatings:		400
Aluminum Substrates		560
Other Substrates		400
Inorganic Zinc Coating		340
Low Activation Interior Coating		420
Mist Coating		610
Navigational Aids Coating		340
Nonskid Coating		340
Organic Zinc Coating		340
Primers		
Finish Primer Surfacer	275	340
High Build Primer Surfacer	275	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
High Temperature Coating		500
Tack Coating		610
Topcoats:		
Extreme High-Gloss Coating	420	490
High Gloss Coating	275	340
Undersea Weapons Systems Coating	275	340
Any Other Coating Type	275	340

Topcoats

- Staff considering consolidating the Topcoat subcategories Extreme High Gloss Coatings and High Gloss Coatings into a single category
 - Would likely result in one of the two categories having its VOC content limit decreased
 - U.S. EPA CTG does not include a separate coating category for Extreme High Gloss Coatings
 - Would like to avoid being any less stringent than the CTG

Table 1 – Marine Vessels

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

Table 2 – Pleasure Craft

Topcoats:		
Extreme High Gloss Coating	490	
High Gloss Coating	420	
Any Other Coating Type	420	

U.S. EPA CTG

Coating Category	VOC limits ^{a b}		
	Grams/liter coating (minus water and exempt compounds)	Grams/liter solvent	
		t ≥ 4.5°C	t
General use	340	571	
Specialty:			
Air flask	340	571	
Antenna	530	1,439
Antifoulant	400	765	
Heat resistant	420	841	
High-gloss	420	841	
High temperature	500	1,227	

Requirements

(d) Requirements

(1) VOC Content of Marine Coatings

~~Except as otherwise provided in this rule, a~~No person~~Person~~ shall ~~not~~ manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage any Marine Coatings for use within South Coast AQMD, nor shall any owner or operator of a Facility possess, store at a worksite, apply or solicit the use of ~~any marine coating~~Marine Coatings, including any VOC-containing material added to the Marine Coatings, within the South Coast AQMD, ~~jurisdiction with a that contains~~ VOC content in excess of the ~~following~~applicable limits ~~shown~~specified in ~~the~~ Table 1 – Table of Standards – I Regulatory VOC Content Limits for Marine Coatings (Table 1). Compliance with the applicable VOC content limits shall be based on VOC content, including any material added to the original Marine Coating supplied by the manufacturer, that are expressed as grams of VOC per liter of coating, as applied, less water and ~~exempt solvents:~~Exempt Compounds.

applicable VOC content limits shall be based on VOC content, including any material added to the original Pleasure Craft Coating supplied by the manufacturer, that are expressed as grams of VOC per liter of coating, as applied, less water and ~~exempt solvents:~~Exempt Compounds.

with the applicable VOC content limit shall be based on VOC content, including any material added to the original coating supplied by the manufacturer, that is expressed as grams of VOC per material of coating, as applied:

- Staff would like to move restrictions on the possession, sale, and use of coatings that contain VOC in excess of applicable limits, from subdivision (e) to subdivision (d) and combine into single paragraphs
 - Each paragraph would precede Tables 1, 2 and 3
 - Consistent with recently amended VOC rule formatting
 - Streamlines rule language

Prohibitions

- Added prohibition language for materials containing pCBtF and/or t-BAc
- Consolidated and reformatted existing prohibition language regarding Exempt Compounds and Carcinogenic Materials
- Added additional prohibition language for carcinogenic materials and exempt compounds that are prohibited from use in other VOC rules

~~(e)~~(f) Prohibition of Possession, Specification and Sale

- (1) ~~No~~ ~~For the purpose of this rule, no person~~ Person shall supply, sell, market, blend, distribute, package, or repackage ~~store at a worksite~~ any ~~marine coating~~ Marine Coating or ~~pleasure craft coating~~ Pleasure Craft Coating ~~subject to this rule~~ for use within ~~the~~ South Coast AQMD, ~~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 the following condition applies:~~ nor shall any owner or operator of a Facility possess, apply, or solicit for use any Marine Coating or Pleasure Coating for use within South Coast AQMD, that contains any of the following chemicals in concentrations greater than the limits indicated below:

Prohibitions

- Added concentration thresholds for cadmium, nickel, lead and hexavalent chromium
- pCBtF and t-BAc prohibition language added

~~(e)~~(f) Prohibition of Possession, Specification and Sale

- (1) ~~No~~ ~~For the purpose of this rule, no person~~ Person shall supply, sell, market, blend, distribute, package, or repackage ~~store at a worksite~~ any ~~marine coating~~ Marine Coating or ~~pleasure craft coating~~ Pleasure Craft Coating ~~subject to this rule~~ for use within ~~the~~ South Coast AQMD, ~~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 the following condition applies:~~ nor shall any owner or operator of a Facility possess, apply, or solicit for use any Marine Coating or Pleasure Coating for use within South Coast AQMD, that contains any of the following chemicals in concentrations greater than the limits indicated below:
 - 1.0 ppm of cadmium, nickel, or lead;
 - 5.0 ppm of hexavalent chromium;
 - 0.01 percent by weight of Group II Exempt Compounds, excluding volatile methylated siloxanes (VMS);
 - 0.1 percent by weight of any VMS; or
 - 0.01 percent by weight of para-Chlorobenzotrifluoride (pCBtF, CAS RN 98-56-5) or tert-Butyl Acetate (t-BAc, CAS RN 540-88-5) that was manufactured after the applicable Final Manufacture Date in Table 4 – pCBtF and t-BAc Prohibition Timeline (Table 4), including any VOC-containing materials added to the original Marine Coating or Pleasure Craft Coating supplied by the manufacturer.

pCBtF and t-BAc Prohibition Timeline

- Added table to display pCBtF and t-BAc prohibition timeline, which includes:
 - Final manufacture date(s)
 - Sell-through date(s)
 - Use-through date(s)
- Considering proposing a longer prohibition timeline for antifoulant coatings to accommodate for potential additional time needed for new pesticide registration

(2) Sell-Through and Use-Through Provision

Any Marine Coating or Pleasure Craft Coating that is manufactured prior to the applicable Table 4 Final Manufacture Date, that contains more than 0.01 percent by weight of pCBtF and/or t-BAc, may be sold, supplied, or offered for sale until the applicable Table 4 Sell-Through Date and may be possessed, used, or solicited for use until the applicable Table 4 Use-Through Date.

Table 4: pCBtF and t-BAc Prohibition Timeline

<u>Category</u>	<u>Prohibition Effective Date</u>	<u>Sell-Through End Date</u>	<u>Use-Through End Date</u>
<u>Antifoulant Coatings</u>	<u>January 1, 20XX</u>	<u>January 1, 20XX</u>	<u>January 1, 20XX</u>
<u>All Other Coating Categories</u>	<u>January 1, 2028</u>	<u>January 1, 2029</u>	<u>January 1, 2030</u>

pCBtF and t-BAc Prohibition Timeline Explained

Table 4: pCBtF and t-BAc Prohibition Timeline

<u>Category</u>	<u>Prohibition Effective Date</u>	<u>Sell-Through End Date</u>	<u>Use-Through End Date</u>
<u>Antifoulant Coatings</u>	<u>January 1, 20XX</u>	<u>January 1, 20XX</u>	<u>January 1, 20XX</u>
<u>All Other Coating Categories</u>	<u>January 1, 2028</u>	<u>January 1, 2029</u>	<u>January 1, 2030</u>

- **Final Manufacture Date** is the last date that products containing greater than 0.01 percent by weight of pCBtF or t-BAc may be manufactured for use in South Coast AQMD
- **Sell-Through Date** is the last date that products containing greater than 0.01 percent by weight of pCBtF or t-BAc may be sold for use in South Coast AQMD
- **Use-Through Date** is the last date that products containing greater than 0.01 percent by weight of pCBtF or t-BAc may be used in South Coast AQMD

Alternative Compliance Schedule Plan

- Staff considering proposing an alternative compliance schedule plan for antifoulant coatings rather than an extended timeline, that can be requested by manufacturers

(2) Alternative Compliance Schedule Plan Requirements

[Under Consideration]

A manufacturer of Antifoulant Coatings sold for use in South Coast AQMD may submit an Alternative Compliance Schedule Plan no later than six months from [Applicable Sell-Through Date] to request an extension of the applicable Table 4 sell-through and use-through periods of no longer than one year each respectively if the manufacturer is not able to receive final regulatory approval from U.S. EPA and/or California Department of Pesticide Regulation (CA DPR) to sell a reformulated Antifoulant Coating that was reformulated for the purpose of complying with [Applicable subdivisions] by [Applicable Sell-Through Date]. The Alternative Compliance Schedule Plan shall include the following:

- (A) The Antifoulant Coating(s) included in the Alternative Compliance Schedule Plan;
- (B) An official document on U.S. EPA and/or CA DPR letterhead signed by the responsible party of the agency that includes:
 - (i) Documentation which demonstrates that the delays are outside the control of the manufacturer;
 - (ii) Communications with U.S. EPA and/or CA DPR confirming initial regulatory approval was sought in a timely and adequate manner;
 - (iii) The estimated date U.S. EPA and/or CA DPR is able to grant full regulatory approval for sale and use of the Antifoulant Coating(s) which the Alternative Compliance Schedule Plan was submitted for; and
 - (iv) Any additional information to substantiate that an Alternative Compliance Schedule Plan is necessary.

Alternative Compliance Schedule Plan

- Additional time may be needed to reformulate antifoulant coatings
 - New pesticide registration may be required by U.S. EPA and California Department of Pesticide Regulation
 - Water quality regulatory agency approval may be required
 - Staff has confirmed VOC-compliant antifoulant coatings that do not contain pCBtF and t-BAC to be commercially available



Recordkeeping Requirements

- Added new recordkeeping requirements needed for enforceability purposes
 - Recordkeeping criteria not included in Rule 109 daily recordkeeping requirements

~~(f)~~(g) Administrative and Recordkeeping Requirements

(1) Recordkeeping for VOC Emissions

Notwithstanding the provisions of subdivision (i), records of ~~marine coating~~Marine Coating usage and ~~pleasure-craft-coating~~Pleasure Craft Coating usage, as applicable, shall be maintained pursuant to ~~South-Coast AQMD~~-Rule 109 - Recordkeeping for Volatile Organic Compound Emissions, ~~and shall be made available to the Executive Officer upon request.~~ and shall at a minimum include the following information:

(A) Coating name and manufacturer;

(B) Applicable coating category; and

(C) Purchase records identifying the coating category, name, total volume of coating purchased.

Administrative Requirements

Added new labeling requirements needed for enforceability purposes

- Clarifies industry confusion regarding coating categories and applicable VOC content limit
- Ensures pCBtF and t-BAc prohibition timeline and VOC content limits are fully enforceable at supplier and end-user levels

(2) Labeling Requirements

The manufacturer of Marine Coatings and Pleasure Craft Coatings, with the exception of Reducers or Thinners, shall include the following information on all product containers:

(A) Applicable coating category;

(B) Whether the product is intended for Marine or Pleasure Craft use, or both;

(C) Whether an Antifoulant Coating is intended and formulated for application to aluminum substrates; and

(D) On and after [*Effective Date*], all Marine Coatings and Pleasure Craft Coatings shall display the date of manufacture of the coating or a code indicating the date of manufacture. The manufacturer shall file an explanation of each code with the Executive Officer.

Exemptions

- Revised exemption for touch-up coatings to reflect newly added definition for Spot Repairs
- Narrowed exemption to only apply to small amounts of coatings
- Exempted coatings would be used to coat a surface area of one square foot or less
 - Surface area open for discussion

~~(3)~~(C) ~~Touch-up coatings~~ Any Marine Coating or Pleasure Craft Coating that is supplied, sold, offered for sale, marketed, manufactured, blended, packaged or repackaged for use within South Coast AQMD in 0.5 fluid ounces or smaller containers and is applied by brush or air brush used for Spot Repairs, as defined by paragraph (c)~~(39)~~(42) of this rule.



Questions

Next Steps

Complete BARCT Assessment

Continue to hold Working Group and individual stakeholder meetings, and conduct site visits

Continue to review existing products on the market

Release Preliminary Draft Proposed Amended Rule and Staff Report

Anticipated Public Hearing – 3rd Quarter

Working Group Materials

- Working group materials for each working group meeting will be made available: <https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules>

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This page includes a list of rules that are actively in rule development or have recently been proposed and/or amended.

Information regarding Working Group Meetings, Public Workshops, and supporting documents such as presentations, draft staff reports, draft proposed rules, comment letters received, and other information can be found by clicking the rule in the table.

Information associated with the rule development process for rules that were adopted or amended within the past five years can be found on our [Archived Page](#).

Please refer to the [South Coast AQMD Rule Book](#) to obtain the current list of adopted or amended rules and regulations.

For current rule forecast please see the monthly [Governing Board Agenda](#).

Rule Name	Description
Regulation III	Fee Rules
Rule 218.2 and Rule 218.3	Proposed Rule 218.2 - Continuous Emission Monitoring System: General Provisions Proposed Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications

Receive PAR 1106 Updates

To receive email updates, subscribe using the South Coast AQMD sign-up page:

<http://www.aqmd.gov/sign-up>

Enter email address and name

Scroll down to “Rule Updates” and check the box for Rule 1106 and click on the subscribe button at bottom of page

Future meeting notices, links to documents, and any updates will be sent via email

The screenshot shows the South Coast AQMD website's sign-up page. At the top, there is a navigation menu with links for Language, F.I.N.D., About, Contact, Grants & Bids, Online Services, I'm Looking For, Sign Up, and a search bar. Below the navigation is the South Coast AQMD logo and a list of menu items: AIR QUALITY, INCENTIVES & PROGRAMS, RULES & COMPLIANCE, PERMITS, NEWS, WEBCASTS, & CALENDAR, TECHNOLOGY ADVANCEMENT, RESOURCES, and MEETING AGENDAS & MINUTES. The main heading is "Sign Up". Below this, there is a paragraph explaining that the AQMD offers periodic newsletter updates via email and provides instructions on how to manage subscriptions. There are two sections for additional information: "If you wish to receive daily pollution forecasts or alerts for specific pollution levels in your area, sign up for Air Alerts." and "For printed copies of South Coast AQMD publications that mailed to you, please visit Subscription Services (charges may apply).". The "Enter the following information:" section contains four input fields: Email Address, Re-Enter Email Address, First Name (optional), and Last Name (optional). Below this is a section for "General Notifications" with three checkboxes: "Events & Conferences" (with description: List of stakeholders interested in events and conferences), "Environmental Justice Conference" (with description: Interest in attending a South Coast AQMD EJ Conference (More Information - TBD)), and "South Coast AQMD News" (with description: Brief updates highlighting what is current at South Coast AQMD, such as conferences, equipment exchanges, advisories, etc.). The "Rule Updates:" section is highlighted with a blue header and contains three rows of checkboxes and rule names: "Rule 1106" (checked, circled in red) with "Marine and Pleasure Craft Coatings", "Rule 1107" with "Coating of Metal Parts and Products", and "Rule 1109.1" with "Refinery Equipment".

Rule Staff Contacts



Chris Bradley
Air Quality Specialist
cbradley@aqmd.gov
909.396.2185

Heather Farr
Planning and Rules Manager
hfarr@aqmd.gov
909.396.3672

Sarady Ka
Program Supervisor
ska@aqmd.gov
909.396.2331

Michael Krause
Assistant Deputy Executive
Officer
mkrause@aqmd.gov
909.396.2706