# Proposed Amended Rule 1136: Wood Products Coatings (PAR 1136)

Working Group Meeting #5
December 10, 2025





South Coast AQMD Headquarters
Conference Room CC2
21865 Copley Drive
Diamond Bar, CA 91765

**Virtually Through Zoom Webinar** 

https://scaqmd.zoom.us/j/1618511850

Webinar ID: 161 851 1850

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Summary of Rule Development Process

Maximum Incremental Reactivity (MIR) VOC Limits

**Prohibition Timeline** 

Initial Draft Rule Language

Next Steps



# Summary of Working Group Meeting (WGM) 4 September 16, 2025

- Presented findings from the Coating Manufacturer Survey data
- Explained considerations to phase out two exempt compounds with toxic endpoints:
  - para-Chlorobenzotrifluoride (pCBtF or Oxsol, CAS#: 98-56-6)
  - *tert*-Butyl Acetate (t-BAc, CAS #: 540-88-5)
- Received and analyzed coating manufacturer survey data
- Presented PW-MIR values for different categories
- Discussed Initial Rule Considerations

# Rule Development Progress Since Last Working Group Meeting

- Received and analyzed coating manufacturer survey data
- Met with coatings manufacturers who responded to the survey

# Rule 1136 Coating Categories Reported

#### **Rule 1136 Coating Categories**

Clear Sealers

Clear Topcoat

Pigmented Primers, Sealers & Undercoats

Pigmented Topcoats

Barrier Coat - Plastic Components

Composite Wood Edge Filler

Extreme Performance Coatings

Fillers

High-Solid Stains

Inks

Mold-Seal Coatings

Multi-Colored Coatings

Low-Solids Barrier Coat - Plastic Components

Low Solid Stains, Toners, and Washcoats

Seven coating categories were reported to be sold in the manufacturer surveys:

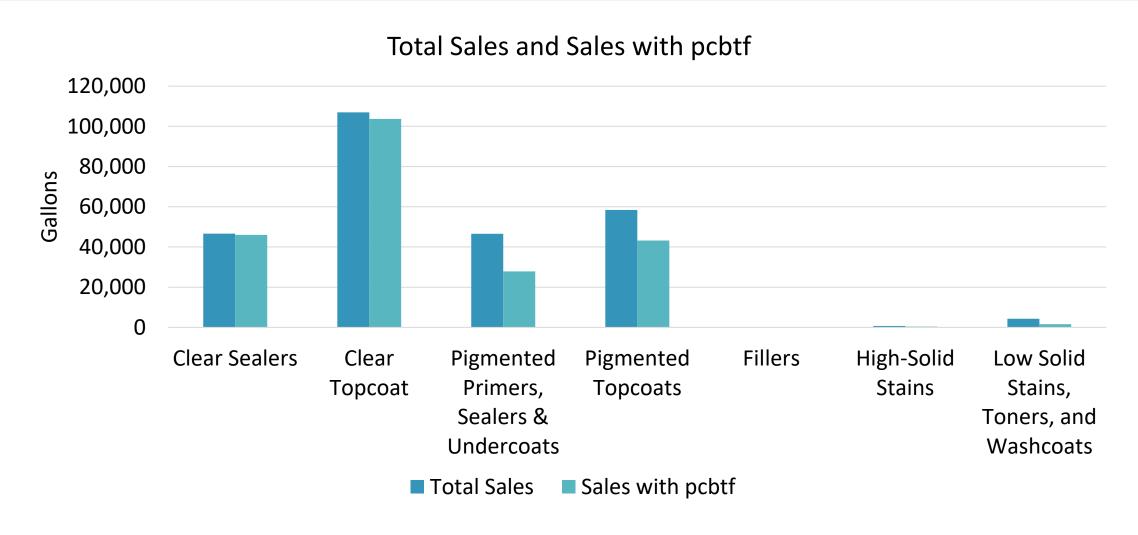
 Surveys identified seven coating categories, six of which reported the presence of pCBtF

No use of t-BAc reported

No sales reported for seven coating categories, consider need for those categories

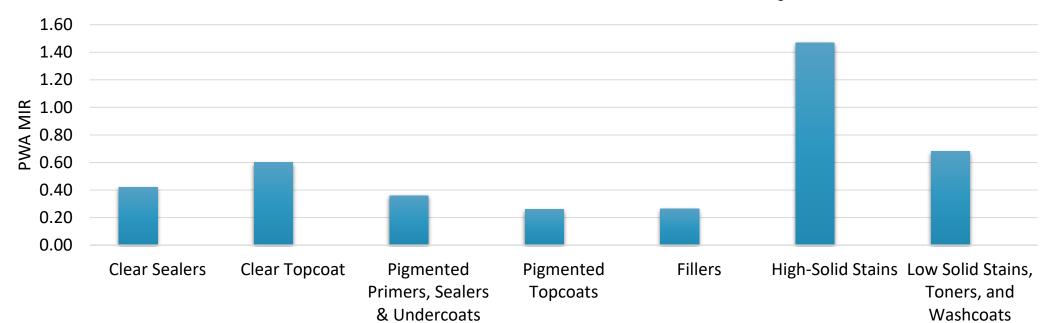
• If no further data submitted, staff will assume pCBtF and t-BAc can be phased out of these categories

# Survey Data – Total Sales and Sales with pCBtF



# Estimated MIR Values for PAR 1136 Coatings Categories from Survey

- Staff evaluated MIR values for different categories for three out of four submitted surveys
  - MIR value provided by two manufacturers for their reported products
  - MIRs estimated based on safety data sheet for one manufacturer's survey
  - MIRs pending for one survey, as staff were unable to locate the product safety data sheets
- Chart shows the average MIR across all products in that category (Product Weighted Average-MIR or PWA-MIR)
- High PWA-MIRs due to aromatic hydrocarbons with MIR values (up to 8 g  $O_3$ /g VOC)



# **Summary of Each Category MIR**

- Clear Topcoats tend to have higher PW-MIR values compared to pigmented topcoats
  - Likely due to higher solids content
- High- and Low-Solid Stains show elevated PW-MIR levels driven by aromatics with high MIR values

Product Category	PWA MIR (g O <sub>3</sub> / g Product)	Category VOC Limit (g/L)
Clear Sealers	0.53	275
Pigmented Primers, Sealers & Undercoats	0.60	275
Clear Topcoats	0.53	275
Pigmented Topcoats	0.46	275
Fillers	0.16	275
High-Solid Stains	1.87	350
Low-Solid Stains, Toners & Washcoats	1.03	120

## Permitted Facilities Transitioining to PW-MIR Coatings

- Permitted facilities are subject to other regulations in addition to Rule 1136
  - Permit requirements, New Source Review, Title V based on mass VOC emissions
- Coatings formulated to meet lower PW-MIR limits may have higher mass-based VOC content, though with equivalent ozone forming potential
- Permitted facilities will be able to use the PW-MIR coatings but must ensure they are staying below their permitted VOC limits, e.g., monthly or daily emission limits
  - VOC emissions are evaluated during the permitting process to comply with New Source Review requirements
  - Rule 1313 requires emission limits on permits

# **Proposed Rule Concept**

## **Proposed Rule Concept**

Maintain current VOC limits and establish alternative PW-MIR limits

Establish a future effective phase-out date for pCBtF, t-BAc, and other Group II Exempt Solvents

Considering three years from rule adoption

After phase-out date, allow sell-through and use-through to address pCBtF-containing coatings in the supply chain

# **Proposed VOC Limits**

Category	VOC Limit (g/L)	PW MIR (g O <sub>3</sub> / g Product)
Primer, Sealer, and Undercoats (PSU)	(6/ -/	(8 0 3) 8 1 10 4 4 5 1
Clear PSU	275	0.53
Pigmented PSU	275	0.60
Topcoats (includes extreme performance and multi-colored coatings)		
Clear Topcoat	275	0.53
Pigmented Topcoats	275	0.46
Other Categories		
High-Solid Stains	350	1.87
Inks	500	N/A*
Mold-Seal Coatings	750	N/A
Fillers	275	N/A
Japans	350	N/A
Other Coatings	275	N/A
Low-Solids		
Low-Solids Barrier Coat - Plastic Components	120	N/A
Low-Solid Stains, Toners, and Washcoats	120	1.03
* No pCRtE reported in the category	350	TBD

<sup>\*</sup> No pCBtF reported in the category

## Sell-Through and Use-Through Considerations



Sell-though and use-through periods allow time to adjust product lines and avoid stranded assets



This can vary depending on end user needs and the product shelf life



Based on discussions with manufacturers and end users, one to three years use through eases the transition to different products

## **Timeline Transition to Products\***



<sup>\*</sup> For discussion purposes only, subject to change

# Rule Proposal Summary

Within 3 years of rule adoption, prohibit pCBtF and t-BAc-containing wood coatings

Mass-based grams per liter (g/L) VOC limits remain unchanged

Establish equivalent, alternative Product Weighted- MIR (PW-MIR) VOC limits

PW-MIR VOC limits are new to South Coast AQMD VOC rules, staff will monitor development and look for opportunities to adjustment in the future

# Rule Language Overview



Reorganized, updated, and removed outdated language

Streamlined coating categories

Added provisions to phase out pCBtF and t-BAc, including alternative PW-MIR limits and prohibition schedule

Propose removing outdated and unused provisions

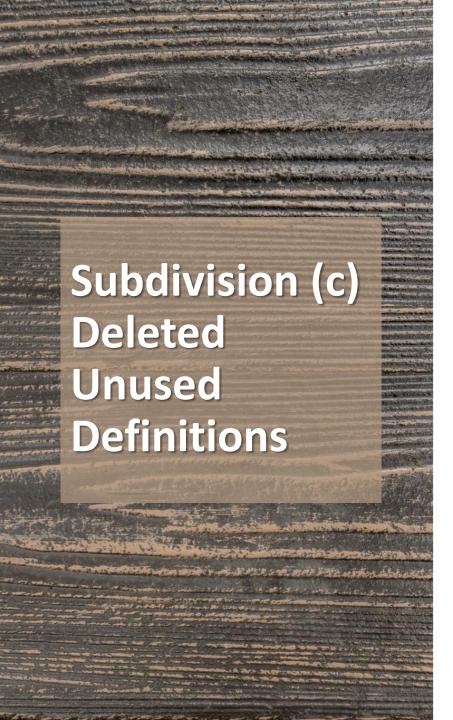
Other minor changes

• Capitalization of defined terms, updated rule references

# Rule Structure Updates

Rule 1136
(a) Purpose and Applicability
(b) Definitions
(c) Requirements
(d) Recordkeeping Requirements
(e) Prohibition of Specifications
(f) Test Methods
(g) Continuous Monitors
(h) Rule 442 Applicability
(i) Alternative Emission Control Plan
(j) Progress Reports
(k) Air Quality Management Plan (AQMP) Technology Assessment Audit
(I) Exemptions

# **Proposed Amended Rule 1136** (a) Purpose (b) Applicability (c) Definitions (d) Requirements (e) Alternative Emission Control Plan (f) Prohibition of Possession, Specification, Sale or Use (g) Administrative Requirements (h) Test Methods (i) Continuous Monitors (j) Rule 442 Applicability (k) Exemptions



- (5) CLASSIC GUITARS are replicas of guitars that were originally manufactured before 1965 and are manufactured by the same original processes.
- (13) CUSTOM REPLICA FURNITURE is new, made-to-order furniture that looks like antique furniture, rather than new furniture. It features detailed wood carvings and bruising of the wood to simulate antique furniture.
- (31) MULTI-COLORED COATING is a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.
- (35) POTENTIAL TO EMIT means the maximum capacity of a facility to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, emissions, or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the EPA Administrator. on the same calendar day.
- (39) RATE PER CALENDAR YEAR is the amount applied between 12:00 a.m. January 1 and 11:59 p.m. December 31.
- (45) STENCIL COATING is an ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to wood products.
- 48) TOUCH-UP COATING is a coating used to cover minor coating imperfections appearing after the main coating operation.



- (2) AIR POLLUTION CONTROL SYSTEM is combination of an enclosed space capable to capturing emissions, and an air pollution control device, which is equipment installed to reduce VOC emissions, installed to collect and reduce emissions from the exhaust stream of any spray booth, curing oven, or application area.
- (6) CLEAR PRIMERS, SEALERS, AND UNDERCOATS are Coatings containing binders, but not opaque pigments, which seals the Wood Product prior to application of the subsequent Coatings.
- (15) EXECUTIVE OFFICER is as defined in Rule 102 Definition of Terms (Rule 102).
- (18) FACILITY is a business, or public service engaged in Wood Coating operations, including the application of Wood Coatings, that are owned or operated by the same Person or Persons and are located on the same or contiguous parcels.
- of the photochemical reactivity of a VOC, which estimates the weight of ozone produced from a weight of VOC expressed as gram of ozone per gram of VOC (g O3/g VOC).



MIR for all ingredients in a Wood Coating Material. The PW-MIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging) and calculated according to the following equations:

Weighted MIR (Wtd-MIR) ingredient= MIR x Weight Fraction ingredient,
And,

 $\underline{PW-MIR} = (\underline{Wtd-MIR})_1 + (\underline{Wtd-MIR})_2 + ... + (\underline{Wtd-MIR})_n$ 

Where,

MIR = ingredient MIR; and

- 1,2, 3..., n = each ingredient in the product up to the total n ingredients in the product
- (50) WOOD COATING MATERIAL is any Coating, Primer, Sealant, Topcoat, Stain, Ink, or Filler, used during the manufacturing, assembly, refinishing, maintenance or service of a Wood Product.



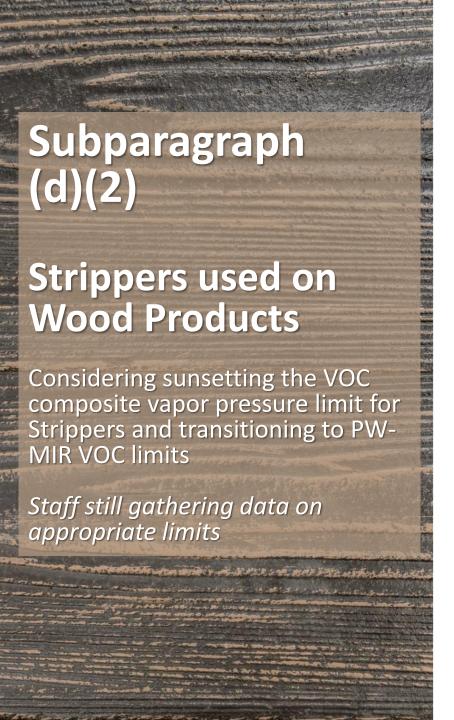
#### **Table 1 – Table of Standards**

VOC Limits-

Coating Categories	Regulatory VOC limits		lbs VOC/	Alternative PW-MIR Limit
Coating Categories	g/L-Coating	lb/gal-Coating	<u>lb of solids</u>	g O <sub>3</sub> /g product
Primer, Sealer, and Undercoats (PSU)				
<u>Clear PSU</u>	<u>275</u>	2.3	0.36	0.53
Pigmented PSU	<u>275</u>	2.3	<u>0.21</u>	<u>0.60</u>
Topcoats (including extreme performance)				
Clear Topcoats	<u>275</u>	2.3	0.35	0.53
Pigmented Topcoats	<u>275</u>	2.3	<u>0.25</u>	<u>0.46</u>
Other Categories				
High-Solids Stains	<u>350</u>	2.9	0.42	1.87
<u>Inks</u>	<u>500</u>	4.2	0.96	<u>N/A</u>
Mold-Seal Coatings	<u>750</u>	<u>6.3</u>	<u>4.2</u>	<u>N/A</u>
<u>Fillers</u>	<u>275</u>	2.3	0.18	<u>N/A</u>
Japans	<u>350</u>	2.9	0.42	<u>N/A</u>
Other Coatings	<u>275</u>	2.3	0.3	<u>N/A</u>

#### <u>Table 2 – Table of Standards for Low Solids Coatings</u> VOC Limits

	Actual VOC Limits		Alternative PW-MIR Limit
	g/L-Material	lb/gal-Material	g O <sub>3</sub> /g product
Low-Solids Barrier Coat  - Plastic Component	<u>120</u>	1.0	<u>N/A</u>
Low-Solids Stains, Toners, and Washcoats	120	1.0	1.03
<u>Strippers</u>	<u>350</u>		<u>TBD</u>



- (B2) Strippers used on Wood Products
  - Until [Three Years from Date of Rule Adoption], in lieu of meeting the Table 2 VOC limit for a Stripper used on Wood Products, Aa personPerson may elect to manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage any Stripper for use within South Coast AQMD, or any owner or operator of a Facility may apply or solicit the use of a Stripper shall not use a stripper on wood products unless:
  - (i) it contains less than 350 grams of VOC per liter of material; or
  - the VOC composite vapor pressure with a Composite Vapor Pressure of is 2 mm-Hg (0.04 psia) or less at 20°C (68°F).

# Subdivision (d)

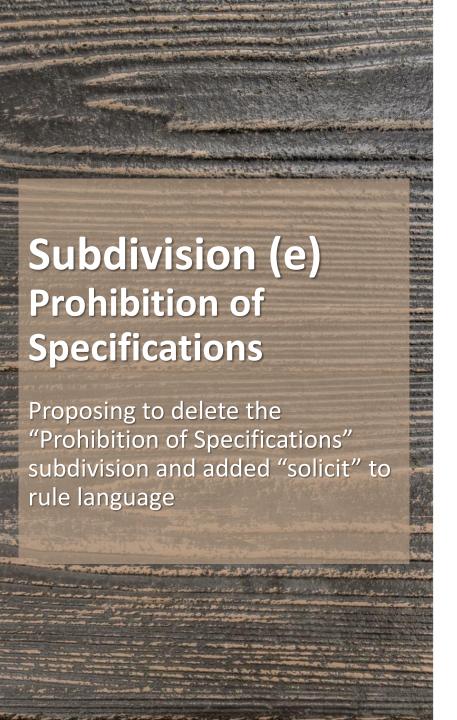
Considering
Removing Emissions
Averaging Provisions

If averaging provision is maintained, additional recordkeeping and reporting requirements will be needed to make it enforceable

#### (ii) Emissions Averaging Plan (Plan)

Owners or operators shall submit a Plan, pursuant to Rule 221 - Plans, to the Executive Officer to participate in emissions averaging. The plan may not be implemented until it is approved in writing by the Executive Officer. Submittal of the Plan does not provide an exemption from the rule requirements. The Plan shall include, at a minimum:

- (I) A description of the wood product coatings to be included in the averaging program; and
- (II) A description of the quantification and recordkeeping procedures for coating usage; coating VOC and solids content; VOC emissions; and calculations to show daily compliance with clause (c)(1)(D)(i).



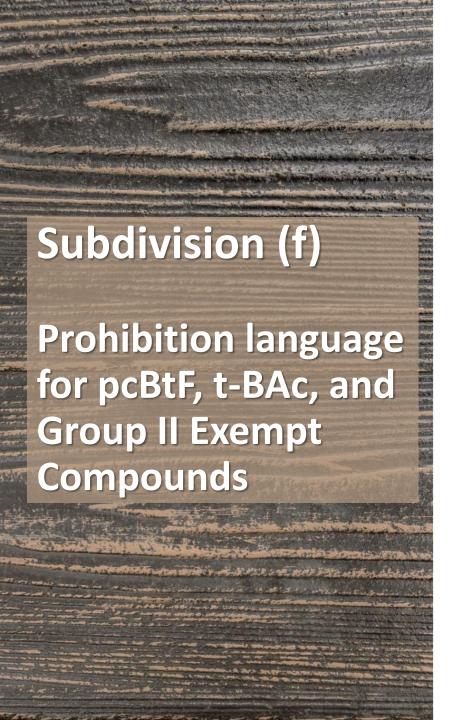
#### (e) Prohibition of Specifications

A person shall not specify the use in the District of any coating to be applied to any wood products subject to the provisions of this rule that does not meet the limits and/or requirements of this rule. The requirements of this paragraph shall apply to all written or oral contracts.

#### (ed) Requirements

(1) VOC Content of <u>Wood</u> Coatings <u>Materials</u> and Strippers

(A) A person No Person or facility shall not manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage any Wood Coating Materials or Stripper for use within South Coast AQMD, nor shall any owner or operator of a Facility apply or solicit any coating to athe use of wood product any Wood Coating Materials or Strippers, which has a VOC content in excess of the applicable limits specified in Table 1 Regulatory VOC Content Limits for Wood Material (Table 1) and Table 2 Regulatory VOC Content Limits for Low Solids Coatings. Compliance with the applicable VOC content limits shall be based on VOC content including any VOC-containing material added to the original coating Wood Coating Material or Stripper—supplied by the manufacturer, which contain VOCs in excess of the applicable:



- Prohibition of Possession, Specification, Sale or Use
  - Prohibition Schedule (Table 3), no Person shall manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage a Wood Coating Material or Stripper for use within South Coast AQMD, nor shall any owner or operator of a Facility possess, apply, or solicit for use any Wood Coating Material or Stripper, including any VOC-containing materials added to the original Wood Coating Material or Stripper supplied by the manufacturer, that contains any of the following chemicals in concentrations greater than the limits indicated below:
    - (A) 0.01 percent by weight of Group II Exempt Compounds, excluding volatile methylated siloxanes (VMS);
    - B) 0.1 percent by weight of VMS; or
    - (C) 0.01 percent by weight of para-Chlorobenzotrifluoride (pCBtF, Chemical Abstracts Service Registration Number 98-56-6) and/or tert-Butyl Acetate (t-BAc, Chemical Abstracts Service Registration Number 540-88-5) for Wood Coating Materials or Strippers manufactured after the applicable Prohibition Date in Table 3 -
    - 2) Sell Through for pCBtF and/or t-BAc containing materials
      - Any Wood Coating Material or Stripper that is manufactured prior to the applicable Table 3 Final Manufacture Date, that contains more than 0.01 percent of pCBtF and/or t-BAc, may be sold, supplied, or offered for sale until the applicable Table 3 Sell-Through Date and may be possessed, used, or solicited until the applicable Table 3 Use-Through Date.

# Subparagraph (f)(2) Phase out Schedule

- Prohibits coatings containing pCBtF, t-BAc, and/or Group II Exempts from being sold into the South Coast AQMD after the Table 3 effective dates
- Coatings manufactured prior to the Final Manufacture Date can be:
  - Sold for one year after the final manufacture date
  - Used for two years after the final manufacture date

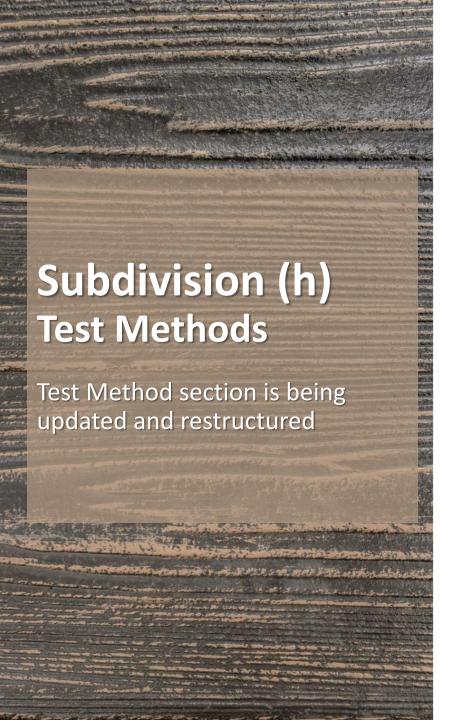
Table 3: Prohibition Schedule

<u>Category</u>	Final Manufacture  Date	<u>Through Date</u>	<u>Use-Through Date</u>
Wood Coating  Materials	[Three Years after <u>Date of Rule</u> <u>Adoption</u> ]	[Four Years after <u>Date of Rule</u> <u>Adoption</u> ]	[Five Years after <u>Date of Rule</u> <u>Adoption</u> ]
<u>Strippers</u>	[Two Months after <u>Date of Rule</u> <u>Adoption</u> ]	[One Years after <u>Date of Rule</u> <u>Adoption</u> ]	[Two Years after <u>Date of Rule</u> <u>Adoption</u> ]



(4) Labeling Requirements for Wood Coating Materials Complying with the Alternative PW-MIR VOC Limits

A Person that manufacturer, supply, sell, offer for sale, market, blend, distribute, package, or repackage for use in South Coast AQMD any Wood Coating Material that elects to comply with the alternative PW-MIR VOC limits in subparagraph (d)(1)(C), shall include the PW-MIR VOC content in g O3/g product, on all containers.



- (5) Determination of Efficiency of Emission Control Systems

  A Person or Facility that elects to comply with the VOC limits in paragraphs
  (d)(1) and/or (d)(2) using an Emission Control System shall:
  - (A) Determine the efficiency of the control device in the Emission Control System by:
    - (i) South Coast AQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency;" or
    - (ii) Any other method approved by the U.S. EPA, CARB, and the South Coast AQMD Executive Officer; and
  - B) Determined the efficiency and the VOC content in the Emission

    Control System exhaust gases, measured and calculated as carbon

    by:
    - (i) U.S. EPA Method 25 Determination of Total Gaseous

      Non-methane Organic Emissions as Carbon;
    - (ii) U.S. EPA Method 25A Determination of Total Gaseous
       Organic Concentration Using a Flame Ionization Analyzer;
    - (iii) South Coast AQMD Test Method 25.1 Determination of <u>Total Gaseous Non-Methane Organic Emissions as Carbon;</u> <u>or</u>
    - (iv) South Coast AQMD Test Method 25.3 Determination of

      Low Concentration Non-Methane Non-Ethane Organic

      Compound Emissions from Clean Fueled Combustion

      Sources



(7) Notwithstanding the requirements of Rule 109(c)(1), Recordkeeping for Volatile Organic Compound Emissions, any facility that switches to waterborne coatings that meet the July 1, 2005 VOC limits may request written approval from the Executive Officer to record data on up to a quarterly basis, provided the Executive Officer determines that such recordkeeping allows for an equivalent level of enforceability.

# Subdivision (k) **Exemptions** Considering to sunset blushing exemption once the PW-MIR limits are in place Provision not enforceable as written Blushing not defined No recordkeeping requirements Provision would add up to an additional 100 g/L VOC to each coating during summer ozone season

- (116) Until [Three Years from Date of Rule Adoption], Notwithstanding notwithstanding the provisions of subparagraph (c)(1)(A)(d)(1)(A), a person or owner or operator of a facilityFacility may add up to 10% by volume of VOC to a topcoat, primer, sealer or undercoat to avoid blushing of the finish during high humidity provided that:
  - (A) the <u>The coating Coating</u> is not applied from April 1 to October 31 of any year; and
  - (B) the <u>The coating Coating</u> contains acetone and no more than 550 grams of VOC per liter of <u>coating Coating</u>, less water and <u>exempt compounds Exempt Compounds</u>, prior to the addition of VOC.

# Comments and Feedback

Staff would appreciate feedback on the rule language by end of December

Planning for an April 2026 Public Hearing

- Preliminary Draft Proposed Amended Rule release date January 16, 2026
- Staff will need time to incorporate changes and circulate for internal review

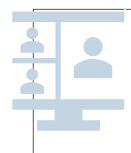
## **Next Steps**



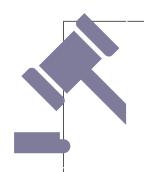
Release Preliminary Draft Rule Language – January 16, 2026



Continue meeting with individual stakeholders and review existing products



Public Workshop – End of January 2026

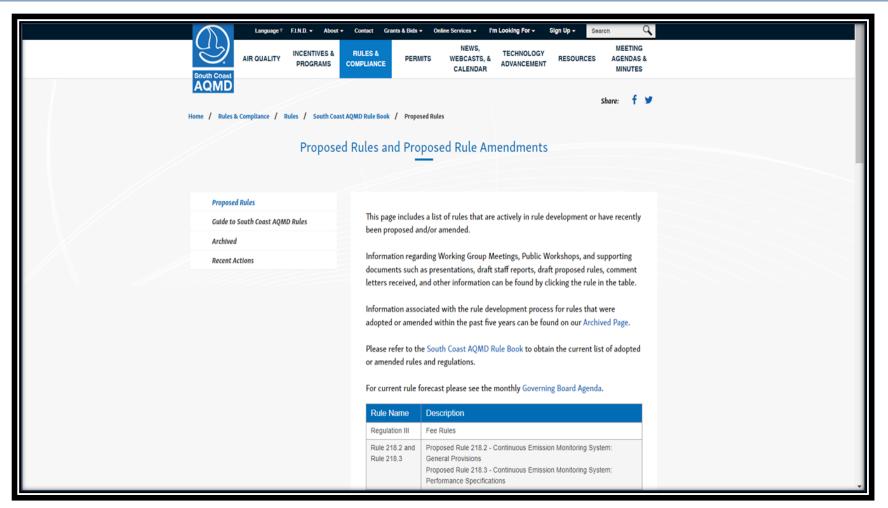


Anticipated Public Hearing – April 2026 (subject to change)

# 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

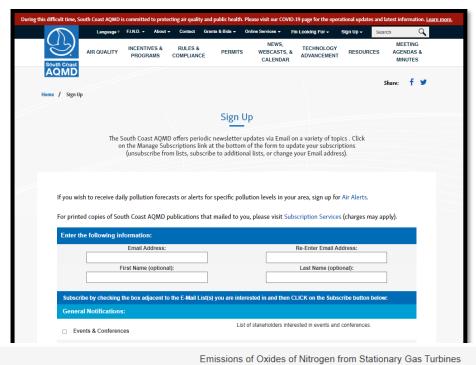


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☐ Rule 1134	Emissions of Oxides of Nitrogen from Stationary Gas Turbines
☐ Rule 1135 and Proposed Rule 429.2	Emissions of Oxides of Nitrogen from Electric Power Generating Systems
<b>☑</b> Rule 1136	Wood Products Coatings
☐ Rule 1138	Control of Emissions from Restaurant Operations
☐ Rule 1138.1	Control of Emissions from Commercial Cooking Operations 34

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