

Proposed Amended Rule 1143 – *Consumer Paint Thinners and Multi-Purpose Solvents* (PAR 1143)

Working Group Meeting #2
June 17, 2026



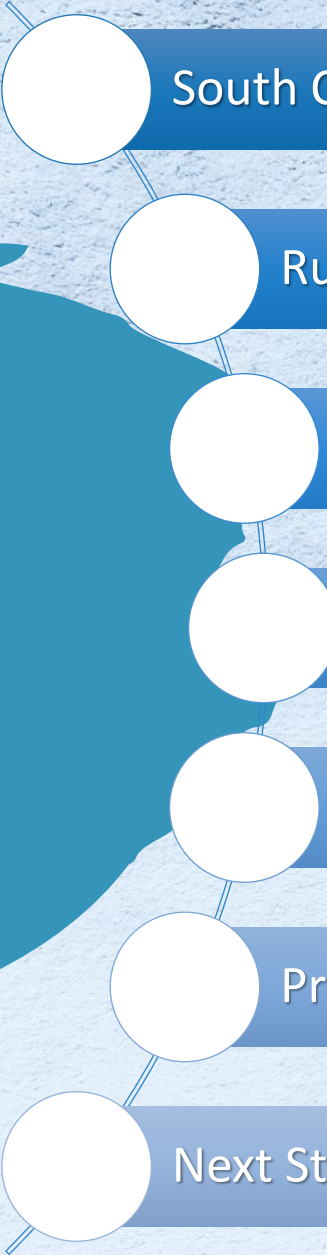
Join Zoom Webinar

<https://aqmd.zoomgov.com/j/1601231455>

Webinar ID: 160 123 1455

Teleconference Dial-In: +1 669 254 5252

Agenda



South Coast AQMD Background

Rule Development Process

VOCs and Exempt Compounds

Recent Rule Developments on pCBtF and t-BAC

Manufacturer Survey Results

Proposed Rule Concepts and Language

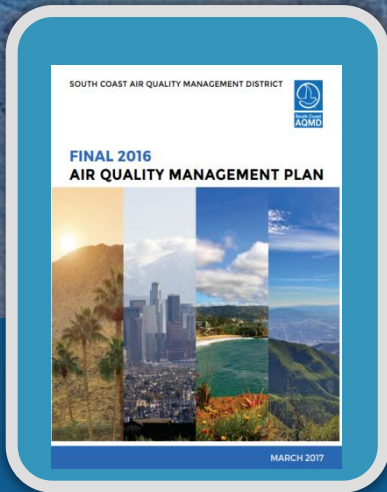
Next Steps and Staff Contact

South Coast Air Quality Management District

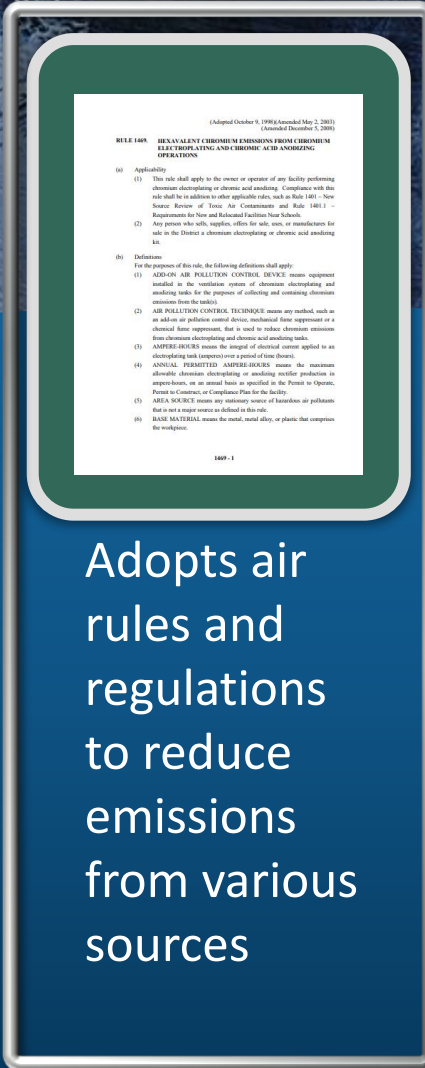
- Local air pollution control agency for Orange County and large portions of Los Angeles County, Riverside County, and San Bernardino County
 - Largest of the 35 local air agencies in California and in the U.S.
 - 10,743 square miles
 - ~17 million residents (45 percent of CA population)
- Responsibilities include:
 - Regulate emissions from stationary sources
 - Permit and inspect over 28,000 facilities
 - Administer over \$100 million of incentive funding annually



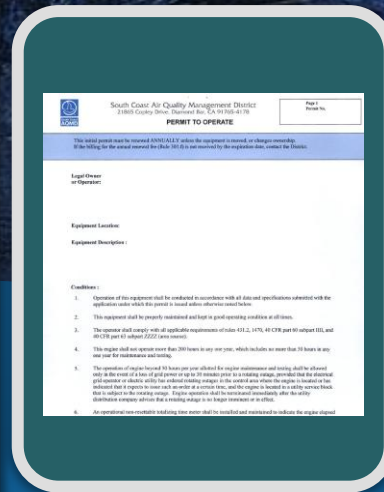
Key South Coast AQMD Activities



Develops the Air Quality Management Plan - blueprint for achieving compliance with federal and state clean air standards



Adopts air rules and regulations to reduce emissions from various sources



Issues permits for equipment that limits the amount of air emissions to ensure compliance with air quality rules



Conducts periodic inspections to ensure compliance with air quality requirements

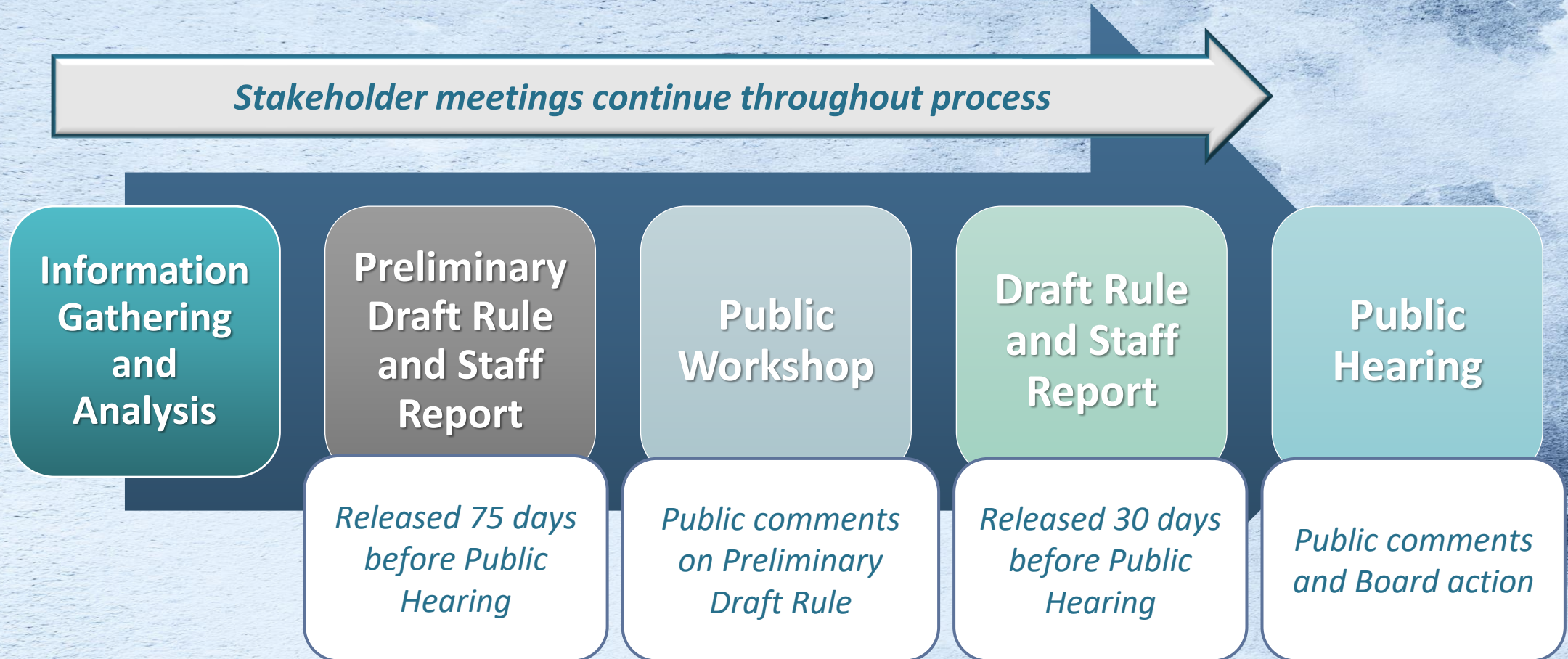


Responds to air quality complaints from the public



Conducts ambient air quality monitoring, including special studies

Overview of Rule Development Process





VOCs and Exempt Compounds

Volatile Organic Compounds (VOCs) Background

- Rule 1143 regulates VOC emissions
- VOC is defined in Rule 102 – Definition of Terms as any volatile compound made of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds
- Can be photochemically reactive and contribute to the formation of ground-level ozone (smog)



Exempt Compounds Background



- Certain solvents are defined as exempt from the definition of VOC by the U.S. EPA if they are negligibly photochemically reactive
 - Defined as less reactive than ethane
- Exempt compounds are not considered toward the VOC content of regulated materials
- U.S. EPA does not consider toxicity when making their designation
- Two exempt compounds of focus are parachlorobenzotrifluoride (pCBtF; CAS # 98-56-6) and *tert*-Butyl Acetate (t-BAc; CAS # 540-88-5)

South Coast AQMD's Defined Exempt Compounds

- South Coast AQMD considers compounds designated as exempt by U.S. EPA, but also considers the toxicity, ozone depletion potential, and other environmental impacts
- Rule 102 breaks 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
- South Coast AQMD sometimes includes limited exemptions to address potential toxicity concerns
 - For example, Rule 1113 – Architectural Coatings and Rule 1151 – Motor Vehicle and Non-assembly Line Coating Operations include limited exemptions for t-BAC

(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 due to low photochemical reactivity

2004 - 2006

U.S. EPA exempted t-BAc as a VOC, South Coast AQMD included limited exemptions

2015

Office of Environmental Health Hazard Assessment (OEHHA) draft 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 Cancer Potency Factor, concluding poses potential cancer risk to humans, South Coast AQMD requested OEHHA evaluate toxicity of pCBtF

2020

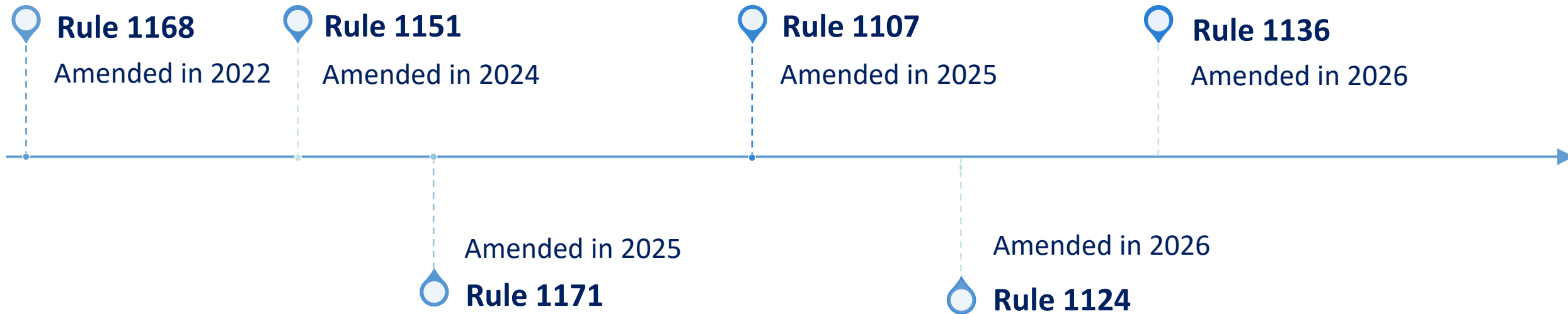
OEHHA finalized pCBtF Inhalation Cancer Potency Factor, concluding pCBtF poses greater cancer risk to humans than t-BAc





Recent Rule Developments

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

Other Efforts

- Staff distributed a manufacturer survey in August 2025 for a suite of rules to assess the extent of pCBtF and t-BAc use
- Survey results were expected mid-November
- Rule schedule and approach will depend on survey results

- **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

Additional information and documents from the rule development processes can be found on the South Coast AQMD website:
<https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules>

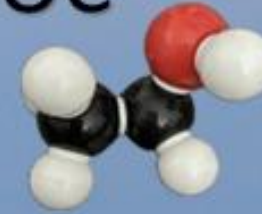
Sunlight



NO_x



VOC



Ozone



Maximum Incremental Reactivity (MIR)

Maximum Incremental Reactivity-Based VOC Limits

- Phasing out of t-BAC and pCBtF presents challenges for reducing VOC emissions
- Staff is considering incorporating maximum incremental reactivity-based (MIR) VOC standards
 - MIR is a measure of the photochemical reactivity of a VOC, which estimates the weight of ozone produced from a weight of VOC
- MIR-based limits restrict the ozone-forming potential of materials by limiting the weighted averages of the MIR value of each solvent (Product-Weighted MIR; PW-MIR)
 - Provide flexibility to manufacturers while reducing air quality impacts
 - Recently adopted Rules 1151, 1171, and 1136 included several optional alternative MIR-based VOC limits

Mass-Based Versus Reactivity Limits

- Mass-based VOC limits treat all solvents equally other than water and exempts solvents which are not considered VOCs
- MIR-based limits are weighted averages based on the MIR value of each solvent*
- MIR-based limits can be particularly useful for specialty categories that do not have a strong pathway to lower limits, such as low-solids coatings and not readily converted to water-based
- CARB uses reactivity-based limits for aerosol coatings

Compound	MIR
2-pentenes	10.47
o-xylene	7.64
butanal	5.97
toluene	4.00
ethanol	1.53
MEK	1.48
nonane	0.78
methanol	0.67
isopropyl alcohol	0.61
tert-Butyl alcohol	0.41
acetone	0.36
pCBtF	0.13
methyl acetate	0.07
D4	0.00

* https://ww2.arb.ca.gov/sites/default/files/2020-12/cp_reg_mir-tables.pdf

Example of Impact of Reactivity

Spray Gun Cleaner

Solvent	Weight Percent	MIR	Weighted Average
Ethanol	1%	1.5	0.02
C7 Alkane	19%	1.5	0.3
Toluene	20%	4.0	0.8
THF	2%	4.3	0.1
Methanol	30%	0.7	0.2
Methyl Acetate	20%	0.07	0.01
	100%		1.4

- Examples of solvent selection impact on reactivity
- Spray gun cleaner will produce almost three times more ozone than cleaning solution

Cleaning Solution

Solvent	Weight Percent	MIR	Weighted Average
Acetone	50%	0.4	0.2
IPA	50%	0.6	0.3
	100%		0.5

The background is a dark, textured blue with visible brushstrokes. A large, irregular, light blue brushstroke shape is centered on the page, containing the text.

Rule 1143 Background

Rule 1143 Background

- Adopted in March 2009
 - Last amended in December 2010
- Purpose:
 - Limit VOC emissions from consumer paint thinners and multi-purpose solvents
- Applicable:
 - Any person who supplies, sells, offers for sale, uses, solicits, or manufactures consumer paint thinners and multi-purpose solvents
 - Commonly used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations
- Working Group Meeting on August 12, 2025, to introduce survey





Manufacturer Survey Results



Stakeholder Survey Objectives

Survey asked manufacturers about products sold into or within South Coast AQMD

- Assist staff with understanding the extent of exempt solvent use in products
- Released August 12, 2025, following Working Group Meeting

Main compounds of interest:

- pCBtF - CAS # 98-56-6
- t-BAc - CAS # 540-88-5

Survey helps staff:

- Evaluate VOC content limits
- Propose feasible prohibition timelines

Stakeholder Survey Results

Two manufacturers responded to the Rule 1143 survey

- One provided suggestions on rule concept
- Staff contacted other stakeholders for proposals and did not receive response

Results of survey:

- Manufacturer 1: Two products contain pCBtF (multi-purpose solvent, paint thinner)
- Manufacturer 2: Three products contain pCBtF (multi-purpose solvents)

Stakeholder Meetings and Suggestions

Stakeholder Meetings

- Working Group Meeting on August 12, 2025
- Met individually with stakeholders on December 16, 2025, and March 3, 2026
- Discussed rule concepts and pCBtF and t-BAc transition timelines

Rule Considerations

- For VOC limit, align with Rule 1171 – Solvent Cleaning Operations for optional MIR limit
 - 0.38 g O₃ /g VOC
 - Equivalent to current limit of 25 g/L
- For products with pCBtF or t-BAc
 - Discontinue manufacturing by end of December 31, 2026
 - Convert distribution supply chain within a one-year sell-through timeline ending on December 31, 2027
 - Staff considering a use-through provision



Proposed Amended Rule Language

Proposed Concepts



Prohibition of pCBtF and t-BAC

Discontinue manufacturing by December 31, 2026



Sell-Through and Use-Through

One year sell-through until December 31, 2027
One year use-through until December 31, 2028



MIR Limit

Optional MIR limit that is aligned with Rule 1171 provisions

(d) Requirements

Adding MIR VOC limit to align with Rule 1171:

(2) Alternative MIR VOC Limit

In lieu of complying with the VOC limits in paragraph (d)(1), a Person may elect to supply, sell, offer for sale, manufacture, market, blend, distribute, package, or repack Consumer Paint Thinners and Consumer Multi-Purpose Solvents for use within the South Coast AQMD that comply with a PW-MIR limit of 0.38 g O₃/g Product provided the Consumer Paint Thinners and Consumer Multi-Purpose Solvents meet the labeling requirements specified in paragraph (e)(3).

(d) Requirements

- (3) A Person shall not supply, sell, offer for sale, manufacture, market, blend, distribute, package, or repackage, any Consumer Paint Thinner or Multi-Purpose Solvent for use within the South Coast AQMD that contains any of the following chemicals in concentrations greater than the limits indicated:
- (A) 0.01 percent by weight of Group II Exempt Compound, as is defined in Rule 102; and
- (B) 0.01 percent by weight of para-Chlorobenzotrifluoride (pCBtF), CAS RN 98-56-6 and tert-Butyl Acetate (t-BAc), CAS RN 540-88-5 manufactured after December 31, 2026.

- Removing pCBtF and t-BAc
 - Main goal of this rule amendment
- Existing prohibition for Group II Exempt Compounds, except for cyclic, branched, or linear, completely methylated siloxanes (VMS)
 - VMS will be included in the prohibition as it is not used in any product

(d) Requirements

Sell-through and use-through:

(24) Sell-Through and Use-Through Provision for Products with pCBtF and t-BAc

~~(A)~~—Any ~~consumer paint thinner~~Consumer Paint Thinner or ~~multi-purpose solvent~~Consumer Multi-Purpose Solvent that is manufactured prior to ~~the effective date of the applicable limit specified in paragraph (d)(1)~~ December 31, 2026, and that ~~has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be sold, supplied, offered for sale, or used for up to one year after the specified effective date~~ contains more than 0.01 percent of pCBtF and t-BAc may be sold, supplied, or offered for sale until December 31, 2027, and used until December 31, 2028.

~~(B)~~—~~Consumer paint thinners manufactured prior to July 9, 2010 and labeled for more than one use including industrial maintenance coating thinning, may be sold, supplied, offered for sale, or used up to April 1, 2011.~~

(e) Labeling Requirements

Labeling, including MIR:

- (43) A Person shall not manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage for use within South Coast AQMD any applicable Consumer Paint Thinner and Consumer Multi-Purpose Solvent unless the ~~Each product~~ container:
- (A) ~~shall clearly~~ Clearly displays the ~~maximum VOC content~~ VOC Content, as determined from the actual product ~~formulation data~~ Formulation Data, and the maximum VOC Content after any dilution as recommended by the Manufacturer; ~~or~~
- (B) For Consumer Paint Thinner and Consumer Multi-Purpose Solvent complying with the alternative PW-MIR VOC limits pursuant to paragraph (d)(2), clearly display the maximum PW-MIR VOC Content on the container, and the maximum PW-MIR VOC Content after any dilution as recommended by the Manufacturer;
- (C) Clearly display the date of manufacture of the contents or a date code indicating the date of manufacture and file with the Executive Officer an explanation of each date code.

(f) Reporting and Recordkeeping Requirements

(f) Reporting and Recordkeeping Requirements

- (1) Any Manufacturer that supplies Consumer Paint Thinners and Consumer Multi-Purpose Solvents with intent to sell in the South Coast AQMD shall:
 - (A) Submit a Form M to the Executive Officer to apply for a Manufacturer identification (ID) number no later than thirty (30) calendar days prior to manufacturing, supplying, selling, or offering for sale, any Consumer Paint Thinner and Consumer Multi-Purpose Solvent for use in the South Coast AQMD;
 - (B) Have the application form signed by the Responsible Party for the Manufacturer certifying that all information submitted (including electronic submittals) is true and correct; and
 - (C) Notify the Executive Officer in writing within 30 days of any change in the Responsible Party for the Manufacturer.
- (2) Within thirty (30) calendar days after a change of Consumer Paint Thinner and Consumer Multi-Purpose Solvent Manufacturer, the new Consumer Paint Thinner and Consumer Multi-Purpose Solvent Manufacturer shall submit the application for a Manufacturer ID number as required in paragraph (f)(1). That filing shall include the previous Consumer Paint Thinner and Consumer Multi-Purpose Solvent Manufacturer's ID number.
- (3) On or before January 1st of each calendar year, all Manufacturers subject to this rule shall provide to the Executive Officer a list of all their U.S. Distributors to whom they supply products subject to this rule, including but not limited to private label and toll manufactured products. The list shall be in a format determined by the Executive Officer and shall include the Distributor's name, address, contact person, and phone number.
- (4) On or before April 1st of each calendar year, each Manufacturer subject to this rule shall submit an annual Consumer Paint Thinner and Consumer Multi-Purpose Solvent sales and emissions report to the Executive Officer for the previous calendar year.

- Streamlining
- Existing language that was consolidated from (e) and (g) under (f)



Next Steps and Staff Contact

Comments and Feedback



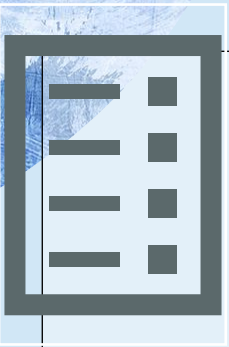
Staff would appreciate feedback by June 30, 2026



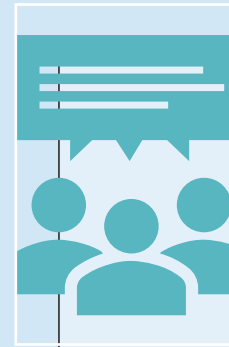
Planning for an October 2026 Public Hearing (subject to change)

- Preliminary Draft Proposed Amended Rule release by July 19, 2026 (subject to change)
- Staff will need time to incorporate changes and circulate for internal review

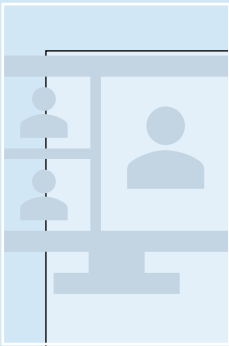
Next Steps



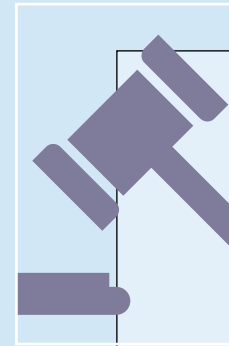
Release Preliminary Draft Rule Language by July 19, 2026
(subject to change)



Continue meeting with individual stakeholders



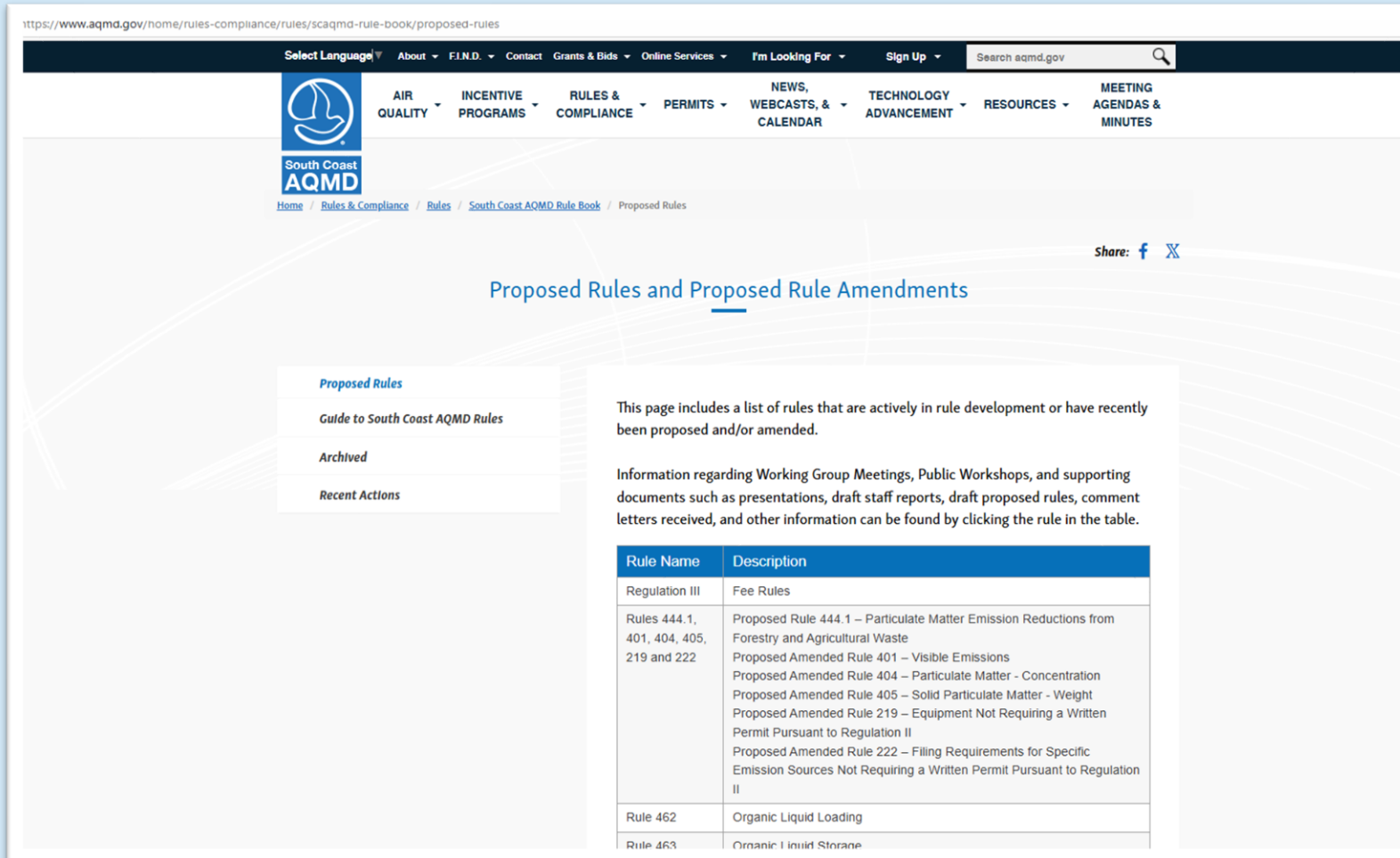
Public Workshop – tentatively scheduled for August 4, 2026
(subject to change)



Anticipated Public Hearing – October 2, 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>



<https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules>

Select Language ▾ About ▾ F.I.N.D. ▾ Contact ▾ Grants & Bids ▾ Online Services ▾ I'm Looking For ▾ Sign Up ▾ Search aqmd.gov 🔍

South Coast AQMD

AIR QUALITY ▾ INCENTIVE PROGRAMS ▾ RULES & COMPLIANCE ▾ PERMITS ▾ NEWS, WEBCASTS, & CALENDAR ▾ TECHNOLOGY ADVANCEMENT ▾ RESOURCES ▾ MEETING AGENDAS & MINUTES

[Home](#) / [Rules & Compliance](#) / [Rules](#) / [South Coast AQMD Rule Book](#) / [Proposed Rules](#)

Share: [f](#) [X](#)

Proposed Rules and Proposed Rule Amendments

Proposed Rules

[Guide to South Coast AQMD Rules](#)

[Archived](#)

[Recent Actions](#)

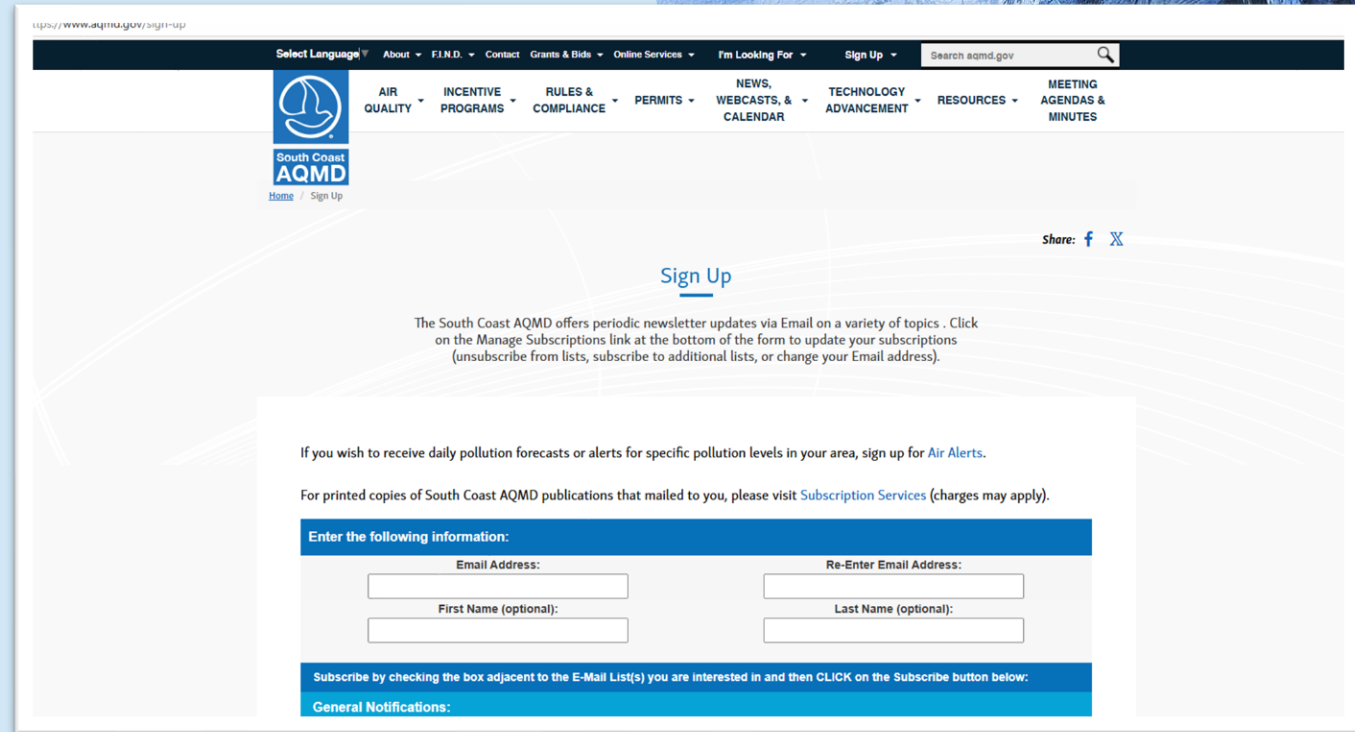
This page includes a list of rules that are actively in rule development or have recently been proposed and/or amended.

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.

Rule Name	Description
Regulation III	Fee Rules
Rules 444.1, 401, 404, 405, 219 and 222	Proposed Rule 444.1 – Particulate Matter Emission Reductions from Forestry and Agricultural Waste Proposed Amended Rule 401 – Visible Emissions Proposed Amended Rule 404 – Particulate Matter - Concentration Proposed Amended Rule 405 – Solid Particulate Matter - Weight Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II
Rule 462	Organic Liquid Loading
Rule 463	Organic Liquid Storage

Receiving Rulemaking Updates

- To receive email updates, sign up on the South Coast AQMD sign up page: <http://www.aqmd.gov/sign-up>
- Enter email address and name
- Subscribe by scrolling down to “Rule Updates,” check the box for Rule 1143, and click on the subscribe button at bottom of page
- Follow the instructions in the confirmation email
- Future meeting notices, links to documents, and any updates will be sent via email



The screenshot shows the South Coast AQMD sign-up page. At the top, there is a navigation bar with links like 'Select Language', 'About', 'F.I.M.D.', 'Contact', 'Grants & Bids', 'Online Services', 'I'm Looking For', 'Sign Up', and a search bar. Below the navigation bar is the South Coast AQMD logo and a 'Sign Up' link. The main content area features a 'Sign Up' heading and a paragraph explaining that the agency offers periodic newsletter updates via email. Below this, there are instructions for signing up for 'Air Alerts' and for printed copies of publications. A form section titled 'Enter the following information:' contains input fields for 'Email Address', 'Re-Enter Email Address', 'First Name (optional)', and 'Last Name (optional)'. At the bottom of the form, there is a section for 'General Notifications' with a checkbox for 'Rule 1143' selected.



The screenshot shows the 'Rule Updates' section of the sign-up page. It contains a list of rules with checkboxes next to them. The rules are: 'Rule 1138.1' (Control of Emissions from Commercial Cooking Operations), 'Rule 1143' (Consumer Paint Thinners and Multi-Purpose Solvents), and 'Rule 1144' (Metalworking Fluids and Direct-Contact Lubricants). The checkbox for 'Rule 1143' is checked.

Rule	Description
☐ Rule 1138.1	Control of Emissions from Commercial Cooking Operations
☒ Rule 1143	Consumer Paint Thinners and Multi-Purpose Solvents
☐ Rule 1144	Metalworking Fluids and Direct-Contact Lubricants

Staff Contact Information

Emily Yen

Air Quality Specialist

eyen@aqmd.gov

909.396.3206

Yanrong Zhu

Program Supervisor

yzhu1@aqmd.gov

909.396.3289

Heather Farr

Planning and Rules Manager

hfarr@aqmd.gov

909.396.3672

Michael Krause

Assistant DEO

mkrause@aqmd.gov

909.396.2706