

# **Proposed Amended Rule 1151**

## **Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations**

### **Working Group Meeting #3**

**May 21, 2024**



**Join Zoom Webinar Meeting**

<https://scaqmd.zoom.us/j/92823189689>

**Teleconference Dial-In: 1-669-900-6833**

**Webinar Meeting ID: 928 2318 9689**

# Agenda

Summary of WGM#2

PAR 1151 Progress Update

Coating Manufacturer Survey Update

BARCT Assessment Progress

Initial Rule Concepts

Next Steps

# Purpose of Proposed Rule Amendment

## Address two Exempt Solvents

- Office of Environmental Health Hazard Assessment confirmed two exempt solvents have toxic endpoints:
  - para-Chlorobenzotrifluoride (pCBtF or Oxsol) - fully exempted as a VOC
  - tert-Butyl Acetate (tBAc) - partially exempted as VOC

## Solvents used in Automotive Coatings

- Manufacturers utilize these two exempt compounds to comply with Rule 1151 VOC limits

## Toxicity Priority

- South Coast AQMD Stationary Source Committee directed staff in 2017 to prioritize lowering toxicity, even if it results in higher VOC emissions

# Summary of Working Group Meeting #2

Working Group Meeting #2 discussions include:

- Rule 1401 background
- PAR 1151 progress update
- Coating manufacturer survey update
- pCBtF and tBAc transition
- Future considerations
- Potential concerns
- Next Steps



## Initial Rule Considerations

- Quickly transition away from toxic exempts by:
  - Allowing higher-VOC autobody refinishing coatings to be sold into South Coast AQMD upon rule adoption
    - Coatings formulated to meet National or European VOC standards without pCBtF or tBAc
  - Requiring pCBtF and tBAc to be phased out over time
  - Establishing lower-VOC limits that would go into effect at a future date
    - BARCT assessment to evaluate technical feasibility and cost effectiveness of future effective limits

# PAR 1151 Progress Update



## Progress Since Working Group Meeting #2

Coating manufacturer survey responses received and data analysis underway

Met with other air districts to discuss and coordinate approach to pCBtF/tBAc

Continued to meet with industry and community stakeholders



# Coating Manufacturer Survey Update

# Coating Manufacturer Survey Background

- Coating Manufacturer Survey distributed in December 2023 to gather information on:
  - VOC content
  - Share of automotive refinishing coating market that contains tBAc and/or pCBtF
    - pCBtF and tBAc content ranges
  - Share of automotive refinishing coating market that is solvent or water-based
- Survey data will guide staff in proposing the pCBtF and tBAc prohibition timeline, future effective VOC content limits, and coating categories



## Summary of Survey Results

- Five of seven coating manufacturers submitted survey responses
- Automotive refinishing coatings sold into South Coast AQMD:
  - Less than 1% contain tBAC
  - ~62% contain pCBtF
  - ~71% are solvent-based
  - ~29% are water-based
- Based on number of coatings reported in survey
  - Not sales weighted averages

# Survey Data Assessment

# Primers

- **Make up ~20% of total California Sales**
- Primers sold into South Coast AQMD
  - **None** reported contain tBAc
  - **~44.5%** contain pCBtF
    - pCBtF content ranged from 0 - 68%
    - Average weight percent content: ~23%
  - **~97%** are solvent-based
  - **~3%** are water-based



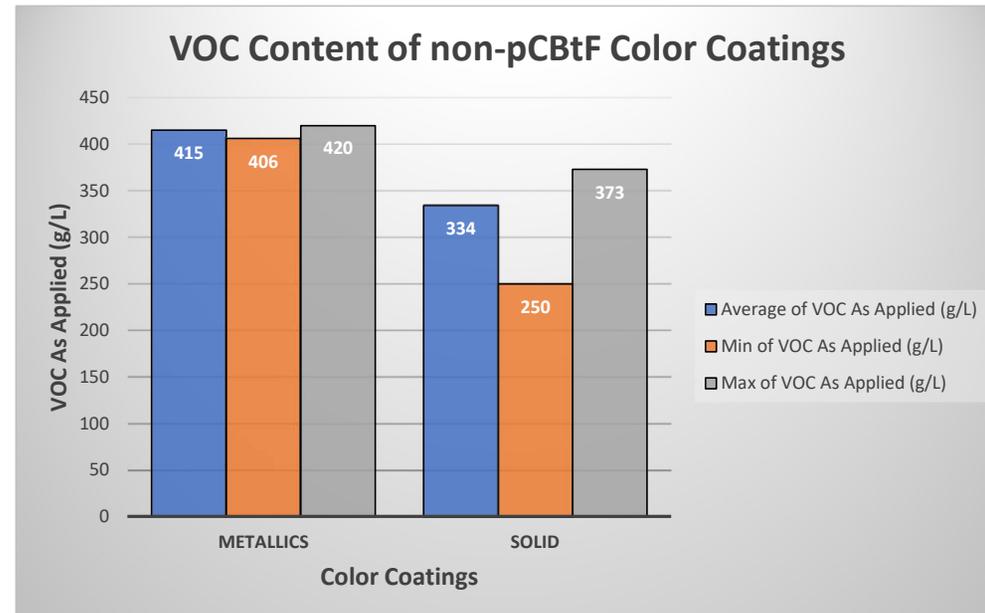
# Color Coatings

- **Make up ~22% of Total California Sales**
- Color coatings sold into South Coast AQMD:
  - **None** reported contain tBAC
  - **~12.5%** contain pCBtF
    - pCBtF content ranged from 0 - 60%
    - Average weight percent content: ~20.5%
  - **~74%** are solvent-based
  - **~26%** are water-based



# VOC Content of Existing Coatings: Color Coatings

- Based on coating manufacturer survey data, manufacturer discussion, and product data sheets, staff identified an opportunity to lower VOC content limit for color coatings
  - Non-pCBtF/tBAC coatings currently available below current rule VOC limits
  - Majority of coatings reported below 350 g/L (current limit is 420 g/L)
- Lower VOC limit would be effective at future effective date
- Staff considering carving out metallic/iridescent color coatings into subcategory
  - Tend to have higher VOC content
  - Smaller sales volume



Color Categories	Number of Products
Metallic Color Coats	25
Solid Color Coats	314

# Clear Coats

- **Make up ~38% of total California Sales**
- Clear coatings sold into South Coast AQMD
  - **None** reported contain tBAc
  - **~60%** contain pCBtF
    - pCBtF content ranged from 0 - 65%
    - Average weight percent content: ~32.5%
  - **~99%** are solvent-based
  - **Less than 1%** are water-based



# Reducers

- Reducers sold into South Coast AQMD
  - **None** reported tBAC
  - **~56%** contain pCBtF
    - pCBtF content ranged from 0 - 100%
    - Average weight percent content: ~54.5%
  - **~62.5%** are solvent-based
  - **~37.5%** are water-based



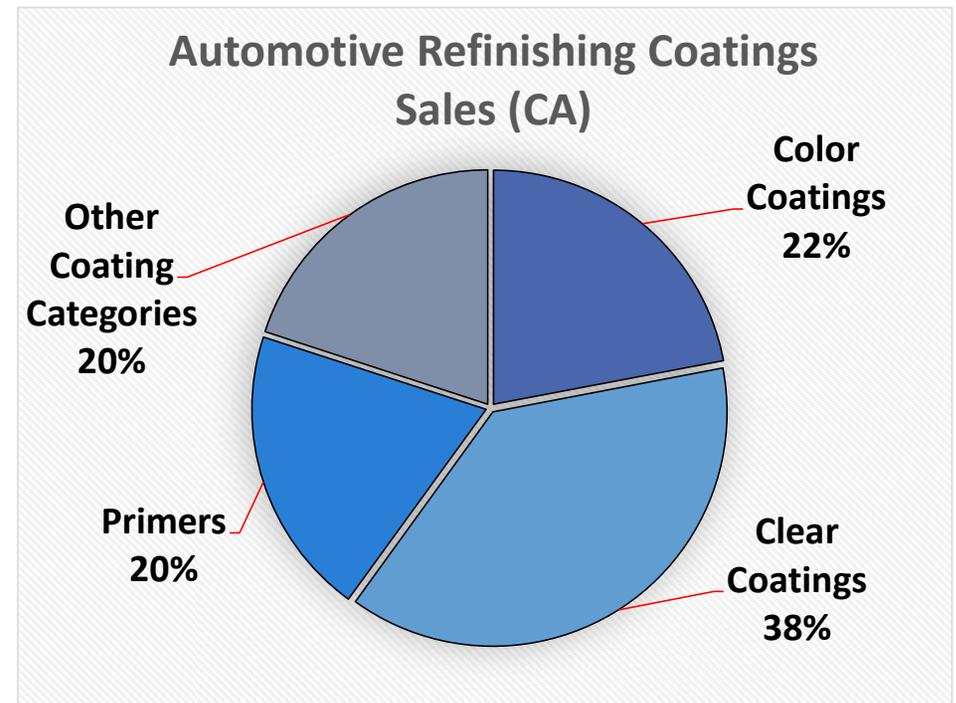
# Other Coating Types

Automotive Coating Category	% Containing tBAc	% Containing pCBtF	% Water-based	pCBtF wt % Range	Average pCBtF wt %
Adhesion Promoter	~20%	~36%	<1%	0-88	~34%
Pretreatment coating	N/A	~39%	~11%	0-71	~18%
Multi-Color coating*	N/A	N/A	N/A	-	-
Single-Stage coating	N/A	~6%	N/A	0-65	~36%
Truck Bed Liner coating	10%	40%	N/A	0-25	~16%
Uniform Finishing coating	N/A	~11%	~20%	0-60	~32%
Temporary Protective coating*	N/A	N/A	N/A	-	-
Underbody coating	N/A	N/A	~11%	-	-
Any Other Coating Types					

\*No Multi-Color coatings and no Temporary Protective coatings reported in survey responses; "N/A" indicates subcategories not reported

# Coating Manufacturer Survey Data Summary

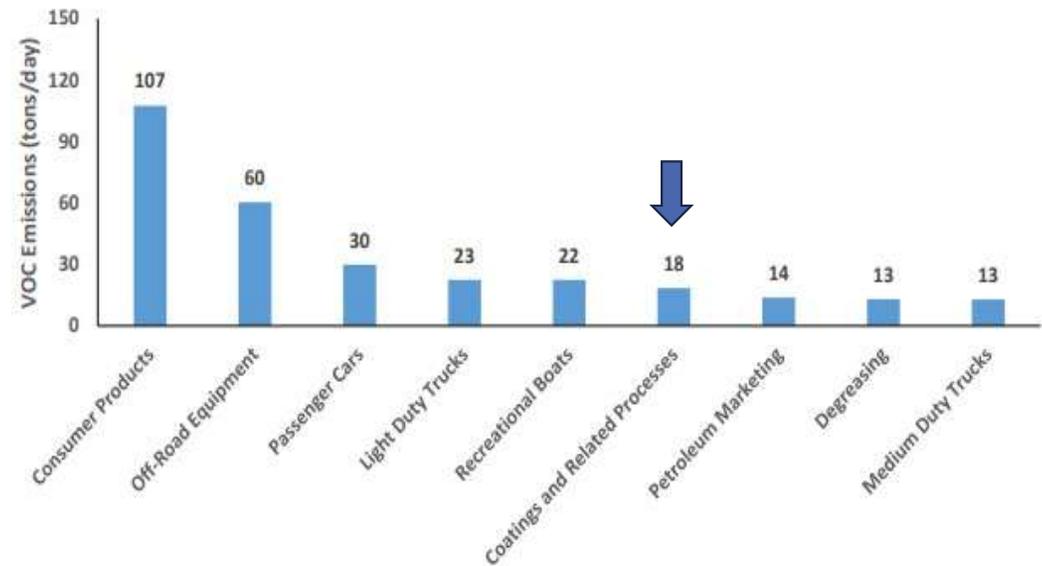
- Color coatings, primers, and clear coatings make up about 80% of automotive refinishing coating sales in California
- pCBtF use prevalent across the three major coating categories, used most in primers and clear coatings
- tBAc only found in adhesion promoters and truck bed liner coatings
  - Niche categories with small sales volumes
- Water-based formulations most common in color coatings and associated components (e.g. reducers/thinners)
  - Waterborne primers and clear coatings exist but do not have significant market penetration
- Prohibition of pCBtF will have significant impact to automotive coatings market



# Estimated Emission Baseline

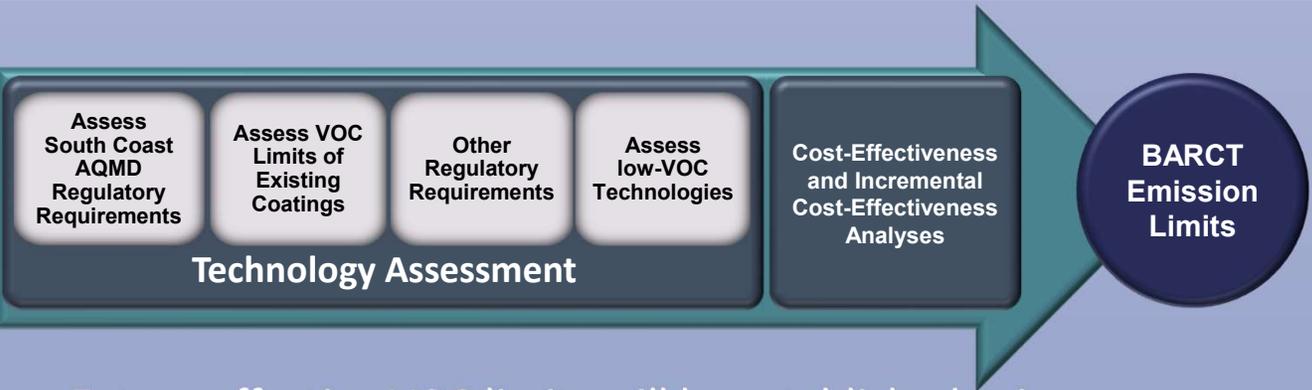
- 2022 Air Quality Management Plan estimated:
  - 18 tons per day (tpd) of VOC are emitted from “Coatings and Related Processes”
  - ~ 8.5 tpd attributed to automotive refinishing coatings
- Staff estimates about 7.7 tpd VOC emissions attributed to automotive refinishing coatings
  - Based on 2002 CARB Automotive Refinishing Coatings Survey, CA population growth data, and South Coast AQMD coating manufacturer survey data

2022 AQMP Top VOC Source Categories



# BARCT Assessment

# BARCT Assessment Background



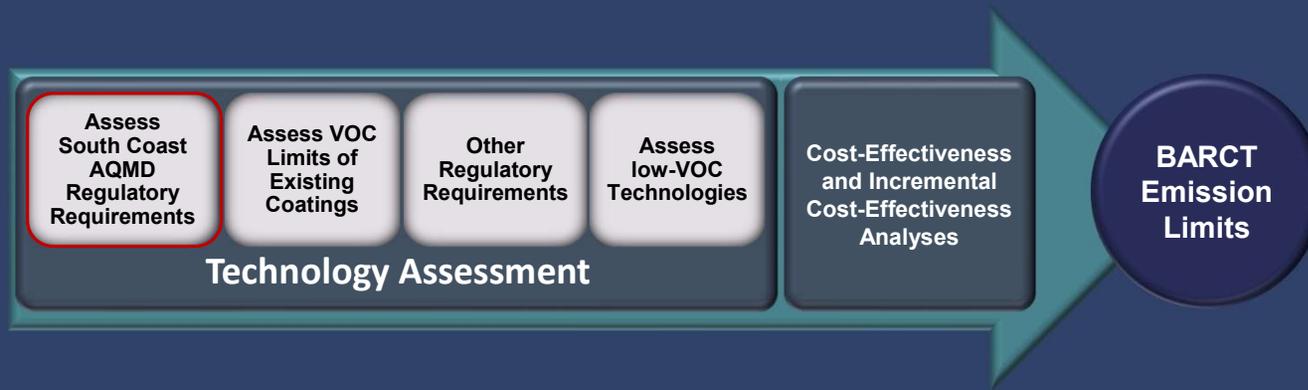
- Future effective VOC limits will be established using a methodical approach that meets state law
- BARCT is defined in the California Health and Safety Code §40406 as:  
*“...an emission limitation that is based on the maximum degree of reduction achievable by each class or category of source, taking into account environmental, energy, and economic impacts.”*

- VOC limits are designed to achieve maximum reductions while taking into account economic impacts
- Cost-effectiveness threshold is \$36,000/ton of VOC reduced

# Coating Categories for BARCT Assessment

- BARCT assessment will focus on 9 of 12 categories
  - Categories that utilize an average of 16% or more pCBtF
- Some categories have high pCBtF content but low sales volume
- Adhesion promoter and truck bed liner category are only categories utilizing tBAC in formulation
- Multi-color coating and temporary protective coating not reported
- Underbody coating not reported with pCBtF or tBAC

Coating Category	pCBtF wt %	Average pCBtF wt %
Adhesion Promoter	Up to 88%	34%
Pretreatment coating	Up to 71%	18%
Primer	Up to 68%	23%
Color Coating	Up to 60%	21%
Single Stage Coating	Up to 65%	36%
Clear Coating	Up to 65%	33%
Uniform Finishing Coating	Up to 60%	32%
Truck Bed Liner Coating	Up to 25%	16%
Reducer	Up to 100%	55%



## Assess South Coast AQMD Regulatory Requirements

# BARCT Assessment: South Coast AQMD Regulatory Requirements and Assess Limits of Existing Coatings

Assess  
South Coast  
AQMD  
Regulatory  
Requirements

- Coating manufacturers rely on exempt solvents to comply with Rule 1151 VOC limits
- December 2005 rule amendment established current categories and VOC limits
  - Became effective July 2008

**TABLE OF STANDARDS**

<b>VOC CONTENT LIMITS</b>		
Grams per Liter of Coating, Less Water and Less Exempt Compounds		
<b>AUTOMOTIVE COATING CATEGORIES</b>	<b>Current Limit</b>	
	g/L	Lb/Gal
Adhesion Promoter	540	4.5
Clear Coating	250	2.1
Color Coating	420	3.5
Multi-Color Coating	680	5.7
Pretreatment Coating	660	5.5
Primer	250	2.1
Single-Stage Coating	340	2.8
Temporary Protective Coating	60	0.5
Truck Bed Liner Coating	310	2.6
Underbody Coating	430	3.6
Uniform Finishing Coating	540	4.5
Any Other Coating Type	250	2.1

# BARCT Assessment: South Coast AQMD Regulatory Requirements (*cont.*)

- **Rule 1113 – Architectural Coatings**
  - Applies coatings applied to stationary sources, fields, or lawns
  - Establishes VOC limits for 59 coating categories
- Some similar categories to Rule 1151:
  - Industrial Maintenance
  - Pretreatment Primers
  - Sealers & Undercoats
  - Metallic Coatings
- Some limits likely achieved with pCBtF/tBAC

**TABLE OF STANDARDS 1  
VOC LIMITS**

**Grams of VOC Per Liter of Coating,  
Less Water and Less Exempt Compounds**

COATING CATEGORY	Category Codes	Current Limit <sup>1</sup>	Effective Date			Small Container Exemption
			1/1/14	2/5/16	1/1/19	
Industrial Maintenance (IM) Coatings	19	100				✓ <sup>5</sup>
Color Indicating Safety Coatings		480				✓ <sup>5</sup>
High Temperature IM Coatings	18	420				✓ <sup>5</sup>
Non-Sacrificial Anti-Graffiti Coatings	19a	100				✓ <sup>5</sup>
Zinc-Rich IM Primers	56	100				✓ <sup>5</sup>
Magnesite Cement Coatings	22	450				✓ <sup>3</sup>
Mastic Coatings	23	100	100			✓
Metallic Pigmented Coatings	24	150	150			✓
Multi-Color Coatings	25	250				✓ <sup>3</sup>
Nonflat Coatings	26, 27, 28	50				✓ <sup>5</sup>
Pre-Treatment Wash Primers	29	420				✓ <sup>3</sup>

# BARCT Assessment: South Coast AQMD Regulatory Requirements (*cont.*)

Assess  
South Coast  
AQMD  
Regulatory  
Requirements

- **Rule 1107 – Coatings of Metal Parts and Products**
- Applies to all metal coating operations except:
  - Aerospace assembly
  - Magnet wire
  - Marine craft
  - Motor Vehicle
  - Metal container
  - Coil coating operations
- Contains similar coating categories to Rule 1151
- Some limits likely achieved with pCBtF/tBAc

VOC LIMITS Less Water and Less Exempt Compounds				
Coating	Air-Dried		Baked	
	g/L	lb/gal	g/L	lb/gal
General One-Component	275	2.3	275	2.3
General Multi-Component	340	2.8	275	2.3
Military Specification	340	2.8	275	2.3
Etching Filler	420	3.5	420	3.5
Solar-Absorbent	420	3.5	360	3.0
Heat-Resistant	420	3.5	360	3.0
Extreme High-Gloss	340	2.8	360	3.0
Metallic	420	3.5	360	3.0
Extreme Performance	420	3.5	360	3.0
Prefabricated Architectural One-Component	275	2.3	275	2.3
Prefabricated Architectural Multi-Component	340	2.8	275	2.3
Touch Up	420	3.5	360	3.0
Repair	420	3.5	360	3.0
Silicone Release	420	3.5	420	3.5
High-Performance Architectural	420	3.5	420	3.5
Camouflage	420	3.5	360	3.0
Vacuum-Metalizing	420	3.5	420	3.5
Mold-Seal	420	3.5	420	3.5
High-Temperature	420	3.5	420	3.5
Electric-Insulating Varnish	420	3.5	420	3.5
Pan Backing	420	3.5	420	3.5
Pretreatment Coatings	420	3.5	420	3.5

# BARCT Assessment: South Coast AQMD Regulatory Requirements (cont.)

- **Rule 1106 – Marine and Pleasure Craft Coatings**
- Applies to marine or pleasure craft coatings and any associated solvent
- Contains similar coating categories to Rule 1151
- Some limits likely achieved with pCBtF/tBAc

TABLE OF STANDARDS II

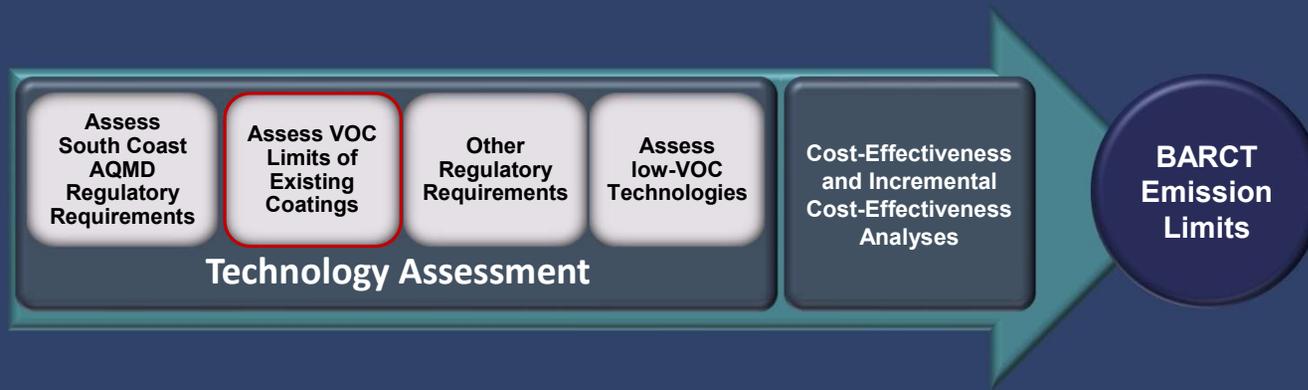
VOC LIMITS Less water and exempt compounds Grams per Liter (g/L)	
PLEASURE CRAFT COATING CATEGORY	CURRENT LIMIT
Antifoulant Coatings:	
Aluminum Substrate	560
Other Substrate	330
Clear Wood Coatings:	
Sealers	550
Varnishes	490
Primer Coatings:	
Finish Primer/Surfacer	420
High Build Primer/Surfacer	340
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

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
Topcoats:		
Extreme High-Gloss Coating	420	490
High Gloss Coating	275	340
Pre-Treatment Wash Primer	420	420

# Conclusion from South Coast AQMD Regulatory Requirements

- Some South Coast AQMD VOC rules or coating categories have lower limits than Rule 1151 limits
  - Most similar coatings likely achieving limits by using pCBtF and/or tBAc
  - Cannot rely on those limits as a way to achieve lower VOC limits in PAR 1151

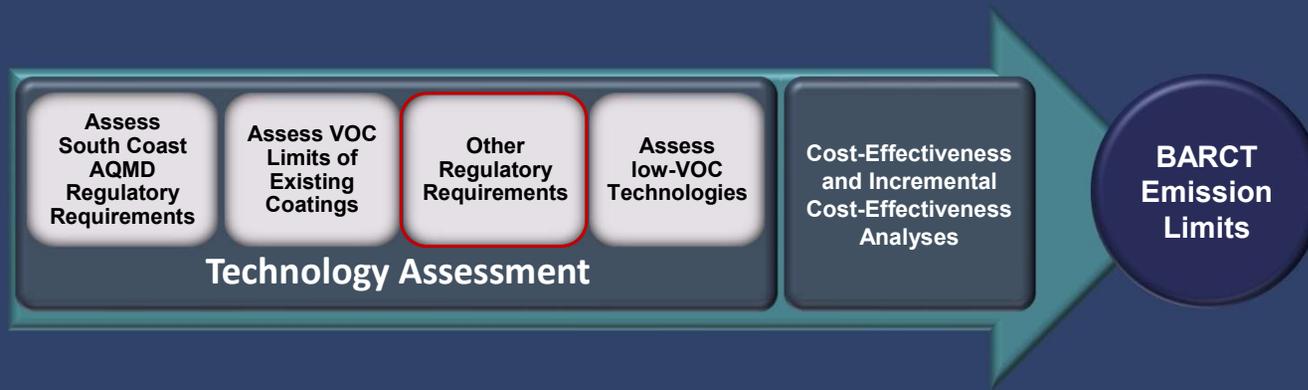


## Assess VOC Limits of Existing Coatings

# VOC Limits of Existing Coatings

- Survey data used to evaluate existing VOC levels for coating categories
- Most coatings use either tBAC or pCBtF to comply with limits
- Two categories utilize tBAC in formulations
  - Adhesion promoters
  - Truck bed liners
  - Low total sales volumes (<1% of total sales)
- European or National limits contain no tBAC or pCBtF
  - Higher VOC limits

Automotive Coating Categories	Average VOC (g/L as Applied)	tBAC in Formulation	pCBtF in Formulation
<i>Adhesion Promoter</i>	528	Yes	Yes
<i>Color Coat</i>	340	No	Yes
<i>Multi-Color Coating</i>	Not Reported	Not Reported	Not Reported
<i>Clear Coat</i>	246	No	Yes
<i>Pretreatment Coating</i>	657	No	Yes
<i>Primer</i>	232	No	Yes
<i>Single-Stage Coatings</i>	334	No	Yes
<i>Temporary Protective Coating</i>	Not Reported	Not Reported	Not Reported
<i>Truck Bed Liner Coating</i>	249	Yes	Yes
<i>Underbody Coating</i>	382	No	Yes
<i>Uniform Finishing Coat</i>	467	No	Yes
<i>Any Other Coating Type</i>	Not Reported	Not Reported	Not Reported



## Other Regulatory Requirements

# BARCT Assessment: Other Regulatory Requirements

- Assessment identifies and compares other regulatory requirements for the same equipment or source type
- Ensures that proposed requirements are consistent, conforms, or more stringent than existing standards
- Staff evaluated:
  - Most California Air Districts with similar automotive coating rules
  - Federal regulation, 40 CFR Part 9 and 59 – National Volatile Organic Compound Emission Standards for Automotive Refinish Coating (National Rule)
  - European Union Regulation for Paints, Varnishes, Vehicle Refinishing Products, and Activities

# BARCT Assessment: Other Regulatory Requirements California Air Districts

Other  
Regulatory  
Requirements

Automotive Coating Categories	Antelope Valley - Rule 1151	Bay Area AQMD - Rule 45	Eastern Kern APCD - Rule 410.4A	Feather River AQMD - Rule 3.19	San Diego County APCD - Rule 67.20	Santa Barbara County APCD - Rule 339
Adhesion Promoter	540	540	540	540	540	540
Color Coating	420	420	420	420	420	420
Clear Coating	250	250	250	250	250	250
Pretreatment Coating (Etch)	660	660	660	660	660	660
Primer	250	250	250	250	250	250
Single-Stage Coating	340	420	340	340	340	340
Truck Bed Liner Coating	310	310	<b>200</b>	310	310	310
Uniform Finishing Coating	540	540	650	540	540	540
Any Other Coating Type	250	250	250	250	250	250

# BARCT Assessment: Other Regulatory Requirements

## European and National Limits

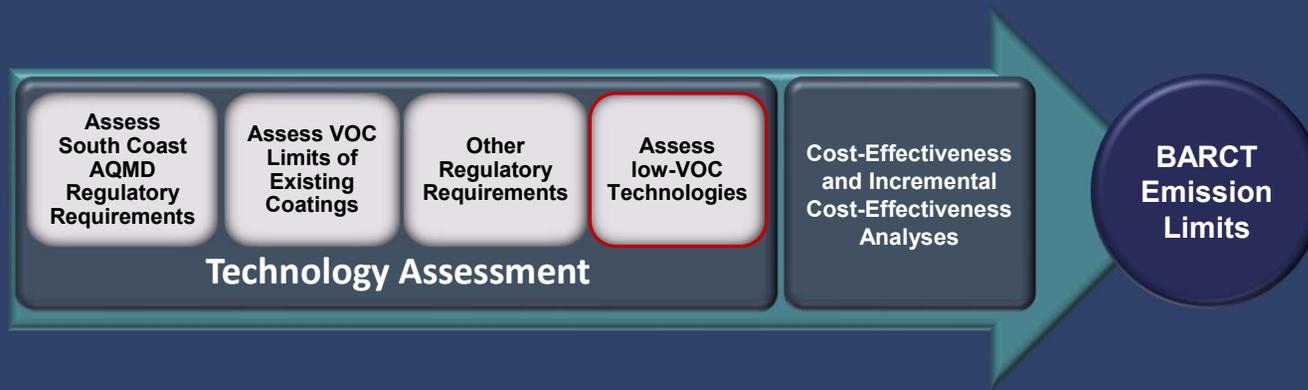
Other  
Regulatory  
Requirements

- European and national VOC limits are typically higher
  - Do not rely on exempt compounds
- European regulations have different VOC definition
  - Based on boiling point
  - Staff reviewed several SDS, solvents used would be considered a VOC under Rule 1151

Automotive Coating Categories	South Coast Limits (g/L)	European Limits (g/L)	National Limits (g/L)
Adhesion Promoter	540	Not Regulated	840
Color Coating	420	420	600
Clear Coating	250	420	600
Pretreatment Coating	660	780	780
Primer	250	540	550-580
Single-Stage Coating	340	420	600
Truck Bed Liner Coating	310	840	420
Uniform Finishing Coating	540	-	840
Specialty Coating	-	840	840
Any Other Coating Type	250	-	840

## Conclusion from Other Regulatory Requirements

- Other California districts have similar VOC limits for automotive coating as South Coast AQMD
  - Rely on pCBtF and/or tBAc
- European and national VOC limits are typically higher
  - Do not rely on exempt compounds



## Assess Low-VOC Technologies

# BARCT Assessment: Assess Low-VOC Technologies

Assess  
low-VOC  
Technologies

Low-VOC Coatings technologies include:

High Solids

Multi-  
Component

Energy  
Curable  
(UV/EB/LED)

Powder  
Coatings

Waterborne  
Coatings

Exempt  
Solvents

New Resin  
Technologies

- Exempt compounds and waterborne technologies are predominant methods used to achieve lower VOC limits
  - No suitable pCBtF and tBAc replacement currently available

# BARCT Assessment: Assess Low-VOC Technologies (*cont.*)

Assess  
low-VOC  
Technologies

- Waterborne primers and clears available that meet current VOC limits
  - Do not have significant market penetration
  - May only be specified for certain substrates
- UV curable options available for primers
- No pCBtF in formulation to meet lower VOC limit
- Products demonstrate feasibility to meet current VOC limits without pCBtF or tBAC

## Low VOC Coatings Identified

Automotive Coatings	Category	VOC As Applied (g/L)
Waterborne 1K Primer – Gray	Primer	86
Waterborne 1K Primer Surfacer - Gray	Primer	86
Waterborne Flexible 1K Primer	Primer	193
Waterborne High-Build 1K Primer	Primer	160
Waterborne Flexible 1K Primer Surfacer	Primer	158
UV Cured Primer Filler	Primer	120
Waterborne Acrylic Urethane Clearcoat	Clearcoat	126

# BARCT Assessment: Assess Low-VOC Technologies (*cont.*)

Staff met with coating resin and raw material suppliers to discuss emerging technologies

- Developed resin system that meets *current* VOC limits without the use of exempt solvents

Manufacturers have been working on reformulations that meet existing limits without pCBtF or tBAc

- Some indicated they are close to bringing products to market

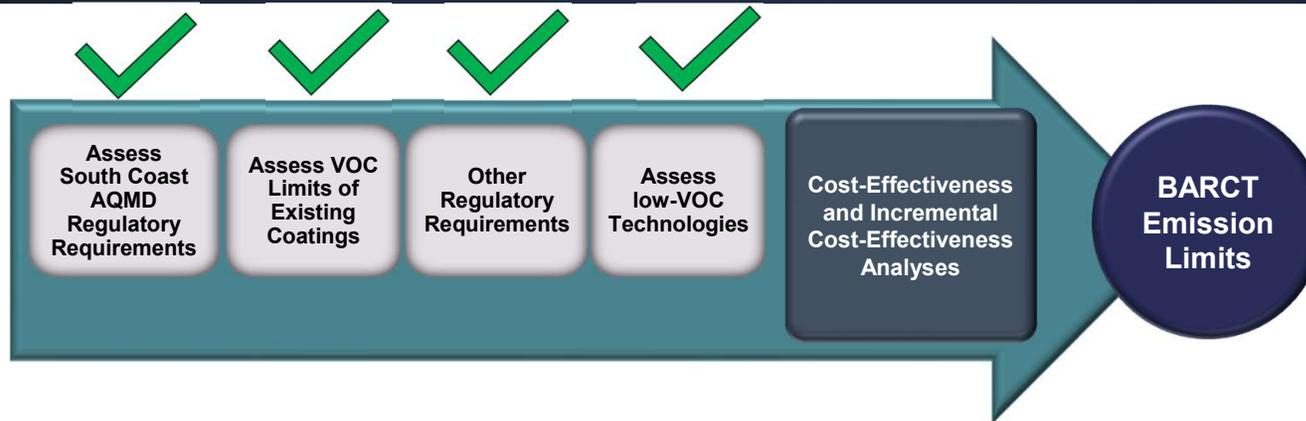
# BARCT Assessment: Initial Staff Recommendations

- Other South Coast AQMD VOC regulations potentially rely on pCBtF and/or tBAc to comply with current VOC limits
  - Cannot be the basis for future proposed limits
- Staff identified some commercially available products that meet current VOC limits without exempt solvents
- Staff did not identify low-VOC options for some categories:
  - Adhesion promoter category (low annual sales volume)

## **Staff Recommendation**

- Establish future-effective VOC limits at the same level as current limits without pCBtF or tBAc
  - Some categories or subcategories may require higher limits
  - Some categories or subcategories may be able to achieve lower limits

# BARCT Assessment: Next Steps



- Cost-effectiveness analysis will be conducted for initially recommended VOC limits
  - Will consider cost difference between high-VOC coatings and the low-VOC coatings
  - Small niche categories may not be cost-effective to reformulate
  - pCBtF is an expensive solvent, there will be some cost savings in reformulations

# Initial Rule Concepts

# Overall Prohibition Timeline Concept



Include sell though and use through provisions

# Proposed Interim VOC Content Limits (*cont.*)

- During the first phase of the tBAC and pCBtF prohibition, VOC limits will be raised to allow for the use of non-pCBtF/tBAC products
- Proposed interim VOC content limits are mostly based on current European VOC limits
  - European VOC limits are generally more stringent than National Rule limits
    - Slightly different definition of a VOC (based on boiling point)
  - National Rule limits that are more stringent than European limits were used for associated categories, and for categories not established in the European regulation

Automotive Coating Categories	South Coast AQMD (g/L)	European Standards (g/L)	National Rule (g/L)
Primer	250	540	550-580
Color coating	420	420	600
Clear coating	250	420	600
Adhesion promoter	540	Not Regulated	840
Pretreatment coating	660	780	780
Single-stage coating	340	420	600
Truck Bed Liner coating	310	420	840
Uniform Finishing coating	540	-	840
Any Other Coating Type	250		840

# Proposed Interim VOC Content Limits (*cont.*)

- Proposed VOC limit for adhesion promoters based on National Rule limit
  - Adhesion promoters not regulated under the European regulation
- Potential new category for metallics
- Based on survey data, several smaller, niche categories have commercially available products that comply with *current VOC* limits without pCBtF/tBAC
- **Higher, interim limits will only be applicable to non-pCBtF/tBAC-containing coatings and components**

Proposed Interim VOC Content Limits

Automotive Coating Categories	Current South Coast AQMD VOC Content Limits (g/L)	Proposed Interim VOC Content Limits (g/L)
Adhesion Promoter	540	840
Clear coating	250	420
<b>Color coating</b>	<b>420</b>	<b>420*</b>
<b><i>Metallic/Iridescent Color coating</i></b>	-	<b>420</b>
Multi-Color Coating	680	680
Pretreatment coating	660	780
Primer	250	540
Single-Stage coating	340	420
Temporary Protective coating	60	60
Truck Bed Liner coating	310	310
Underbody coating	430	430
Uniform Finishing coating	540	540
Any Other Coating Type	250	250

\* Considering lower future VOC limit



## Prohibition, Sell-Through, and Use-Through Provisions

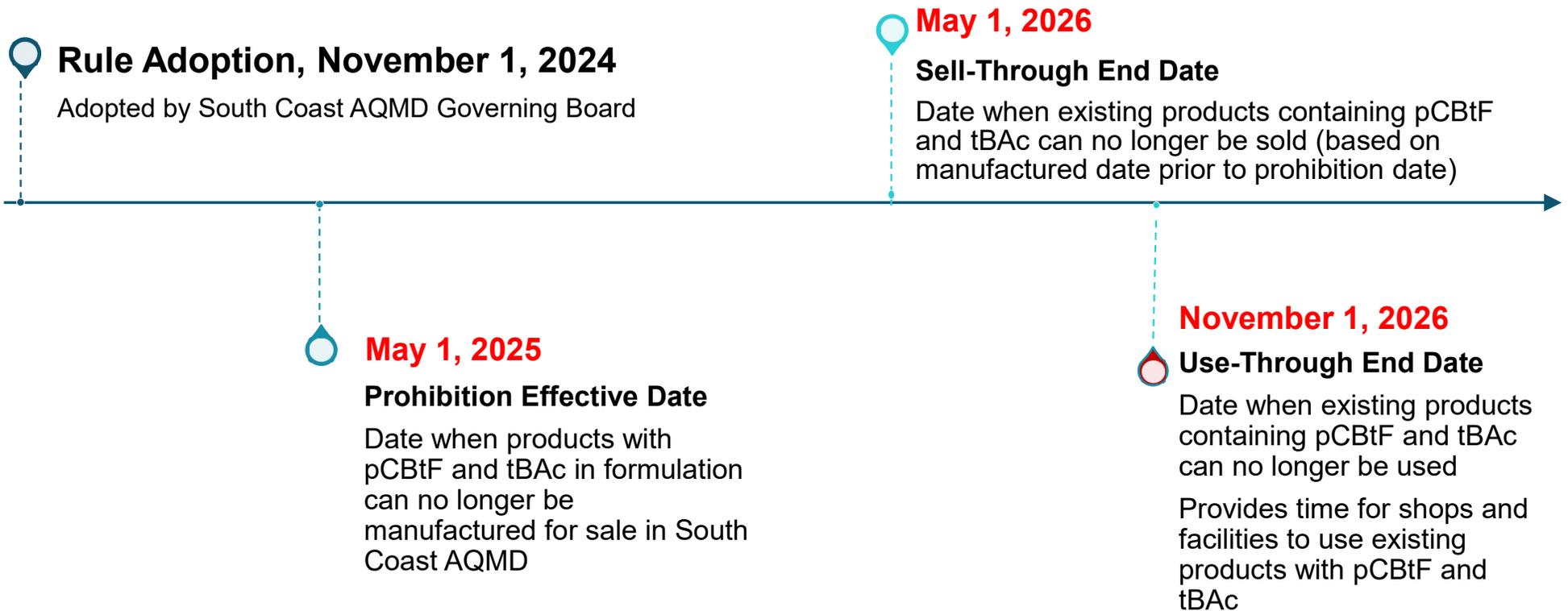
- Staff is proposing a prohibition, sell-through, and use-through end dates
- Prohibition date is date manufacturers must stop producing pCBtF/tBAC-based coatings for sale into South Coast AQMD
- Sell-through allows coating manufacturers time to sell products manufactured prior to prohibition date already in the supply chain
- Use-through allows autobody shops time to use remaining products purchased before the prohibition took effect
- Provisions address stranded assets from both the coating manufacturers and auto body shops

# Proposed pCBtF and tBAc Prohibition Timeline(s)

- Prohibition, sell-through, and use-through end dates establishes a 24-month timeframe to phase out of pCBtF and tBAc
- Coating manufacturers stated at least two years needed to fully transition non-pCBtF/tBAc products into South Coast AQMD market due to logistics, color-match certification and labeling
  - Dates address stranded assets for products already in supply chain

Automotive Coating Categories	Prohibition Effective Date	Sell-through End Date	Use-through End Date
	<b>pCBtF and tBAc Prohibition Effective Dates</b>		
All Regulated Products	6 months from date of rule adoption	18 months from date of rule adoption	24 months from date of rule adoption

# Proposed Prohibition Timeline Example for pCBtF and tBAc





## Future Effective VOC Limits

Will discuss proposed future effective VOC limits and compliance schedule in next meetings

# Other Considerations

# Potential New Coating Categories

- Considering creating several new coating subcategories with separate VOC limits
  - Metallic/iridescent
  - Matte clears
    - Manufacturers indicated matte clear coatings are niche coatings requiring higher VOC limits to achieve appearance
- Allow VOC limit to be lowered for main category and raise VOC for specialty coatings that need higher VOCs
  - Specialty coatings sold in smaller quantities
- Lower limits will partially offset VOC increase from interim VOC limits
- Several types of primers being used, subcategories could allow for different VOC levels
  - National rule has different categories with different limits

## Metallic/Iridescent Color coatings

- Subcategory of color coatings

## Matte Clear coatings

- Subcategory of clear coatings

## Matte Single-Stage coatings

- Subcategory of single stage coatings

## Primer Sealer and Primer Surfacer

- Subcategories of primers



## General Quantity and Emission Report (QER)

- Staff is considering a reporting requirement similar to those in other VOC rules
- Format would be similar to the coating manufacturer survey distributed
- Will be used to quantify emissions from automotive coatings and for future rule amendments

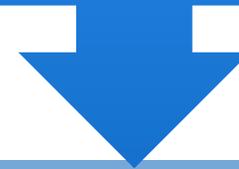
- (21) MULTI-COLOR COATING means any automotive coating that exhibits more than one color in the dried film after a single application, is packaged in a single container, and hides surface defects on areas of heavy use, and which is applied over a primer or adhesion promoter.
- (27) TEMPORARY PROTECTIVE COATING means any automotive coating specifically labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.

## Removing Categories

- No Multi-Color coatings or Temporary Protective coatings were reported in survey
- Please provide feedback if coatings are being manufactured and used

## Reducers/Thinners

South Coast AQMD does not have a VOC content limit for reducers or thinners in Rule 1151



Staff considering a prohibition of possession, sale and distribution of coating components, such as reducers or thinners, that produce a coating with a higher VOC content than its associated limit

Discourage use of high-VOC content reducers, and/or other components, with coatings already at or near the applicable VOC limit *before* mixing

# Staff's Conclusions

Fastest way to phase out use of PCBtF is to raise VOC content limits (interim limit) to accommodate non-pCBtF/tBAc coatings

Adequate time needed for coating manufacturers to reformulate coatings without pCBtF

Technically feasible to reduce limits (future effective VOC limits) back down to current VOC limits

# Next Steps

Complete BARCT Assessment

Release Initial Version of Draft Rule Language

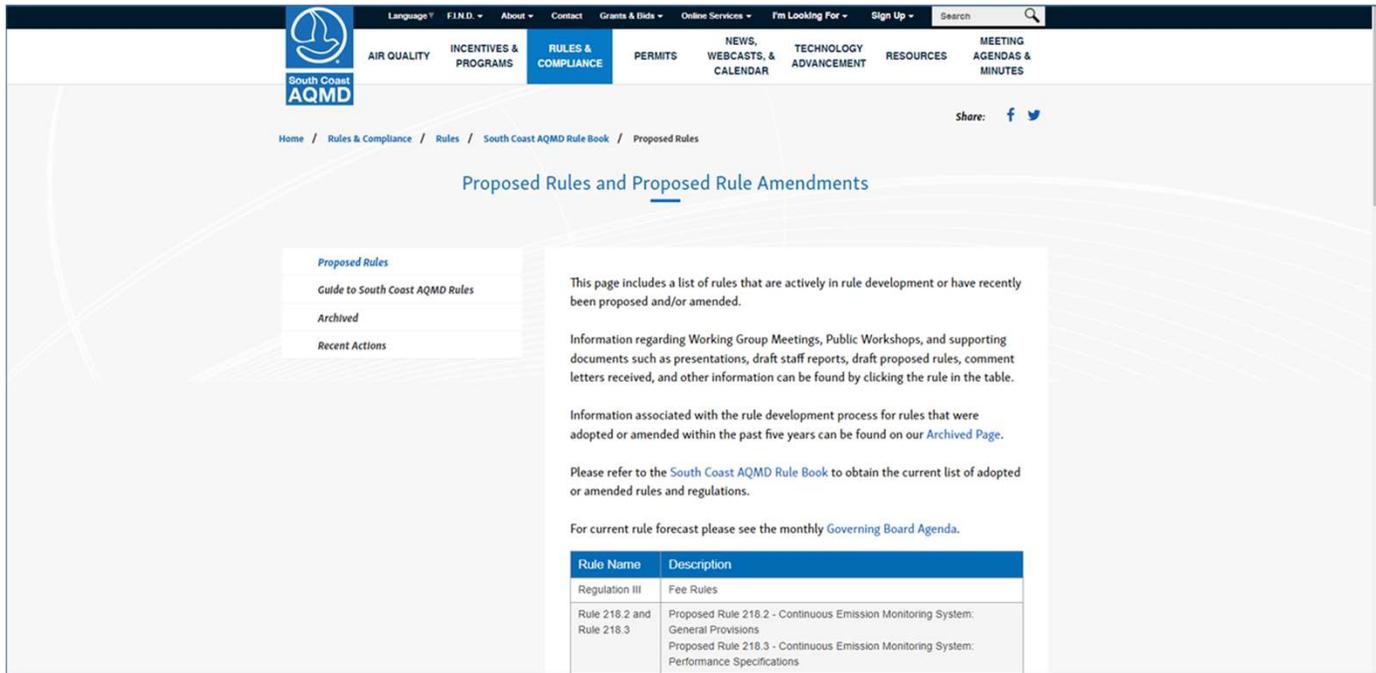
Continue to hold Working Group and individual stakeholder meetings

Continue to review existing products on the market

Anticipated Public Hearing – 4<sup>th</sup> 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>



The screenshot shows the South Coast AQMD website. The navigation menu includes: Language, FIND, About, Contact, Grants & Bids, Online Services, I'm Looking For, Sign Up, and Search. The main navigation bar includes: AIR QUALITY, INCENTIVES & PROGRAMS, RULES & COMPLIANCE (highlighted), PERMITS, NEWS, WEBCASTS, & CALENDAR, TECHNOLOGY ADVANCEMENT, RESOURCES, and MEETING AGENDAS & MINUTES. The breadcrumb trail is: Home / Rules & Compliance / Rules / South Coast AQMD Rule Book / Proposed Rules. The page title is "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.

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

# Receiving PAR 1151 Updates

- To receive email updates, sign up at South Coast AQMD sign up page  
<http://www.aqmd.gov/sign-up>

Enter email address and name

Subscribe by scrolling down to “Rule Updates” and check the box for Rule 1151 and click on the subscribe button at bottom of page

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

During this difficult time, South Coast AQMD is committed to protecting air quality and public health. Please visit our COVID-19 page for the operational updates and latest information. [Learn more.](#)

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## Sign Up

The South Coast AQMD offers periodic newsletter updates via Email on a variety of topics. Click on the Manage Subscriptions link at the bottom of the form to update your subscriptions (unsubscribe from lists, subscribe to additional lists, or change your Email address).

If you wish to receive daily pollution forecasts or alerts for specific pollution levels in your area, sign up for [Air Alerts](#).

For printed copies of South Coast AQMD publications that mailed to you, please visit [Subscription Services](#) (charges may apply).

**Enter the following information:**

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**General Notifications:**

Events & Conferences List of stakeholders interested in events and conferences.

Environmental Justice Conference Interest in attending a South Coast AQMD EJ Conference (More Information - TBD)

South Coast AQMD News Brief updates highlighting what is current at South Coast AQMD, such as conferences, equipment exchanges, advisories, etc.

**Rule Updates:**

Rule 1151 Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations

Rule 1153.1 Emissions of Oxides of Nitrogen from Commercial Food Ovens

Rule 1159.1 Control of NOx Emissions from Nitric Acid Tanks

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