

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Preliminary Draft Staff Report

Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents

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TABLE OF CONTENTS

Chapter 1 : BACKGROUND.....	1-0
Introduction.....	1-1
Regulatory History.....	1-1
Comparative Toxicity Context for pCBtF and t-BAc.....	1-2
Affected Industries.....	1-3
Process Description.....	1-3
Public Process	1-3
Chapter 2 : TECHNOLOGY ASSESSMENT.....	2-0
VOC Control.....	2-1
PW-MIR Compliance Pathway.....	2-1
Chapter 3 : SUMMARY OF PROPOSALS	3-0
Introduction.....	3-1
Proposed Amended Rule Structure.....	3-1
Proposed Amended Rule 1143.....	3-1
Chapter 4 : IMPACT ASSESSMENT	4-1
Emission Impacts	4-2
Costs.....	4-2
Socioeconomic Impact Assessment.....	4-2
California Environmental Quality Act (CEQA)	4-2
Draft Findings Under the Health and Safety Code	4-3
Comparative Analysis.....	4-3

LIST OF TABLES

Table 1-1: Working Group Meetings.....	1-4
Table 2-1: Survey Questions.....	2-3
Table 2-2: Summary of the Number of Products Reported in Survey.....	2-3
Table 2-4: Summary of PW-MIR VOC Content Values and Existing VOC Limits.....	2-4
Table 2-5: Proposed Prohibition Schedule	2-4
Table 3-1: Summary of the VOC Limits	3-3
Table 3-2: Table of MIR VOC Limit.....	3-4
Table 3-3: Prohibition Schedule	3-5
Table 4-1: Estimated VOC Emissions by Category Reported in Manufacturer Survey.....	4-2

EXECUTIVE SUMMARY

Rule 1143 – Consumer Paint Thinners & Multi-Purpose Solvents (Rule 1143) was adopted in 2009 to reduce emissions of Volatile Organic Compounds (VOC) from the use, storage, and disposal of consumer paint thinners and consumer multi-purpose solvents that were not regulated by the California Air Resources Board (CARB). Since its adoption, the rule has been amended three times to support the South Coast Air Quality Management District’s (South Coast AQMD) ongoing efforts to reduce VOC emissions.

As manufacturers reformulated consumer paint thinners and consumer multi-purpose solvents to comply with increasingly stringent VOC requirements, some transitioned to the use of VOC-exempt solvents such as *para*-Chlorobenzotrifluoride (pCBtF; Chemical Abstracts Service Registration Number (CAS RN): 98-56-6) and *tert*-Butyl Acetate (t-BAc; CAS RN: 540-88-5). Subsequent toxicological evaluations conducted by the Office of Environmental Health Hazard Assessment (OEHHA) identified toxic endpoints for these compounds, including cancer potency values comparable to or exceeding chemicals already restricted under South Coast AQMD rules. Stationary Source Committee members directed staff to assess pCBtF and t-BAc usage and develop an approach to reduce exposure to these compounds.

To better characterize exempt-solvent use in the marketplace, staff conducted a manufacturer survey. Survey responses identified six products of different sizes, including two consumer paint thinners and four consumer multi-purpose solvents, that currently rely on pCBtF in their formulation. No products were identified as using t-BAc. Stakeholders requested alternative reactivity-based Product-Weighted Maximum Incremental Reactivity (PW-MIR) VOC limits for both consumer paint thinners and consumer multi-purpose solvents. PW-MIR VOC limits are based on equivalent ozone forming potential.

PAR 1143 proposes to:

- Maintain the existing VOC limits for consumer paint thinners and consumer multi-purpose solvents;
- Establish a prohibition schedule for pCBtF and t-BAc in consumer paint thinners and consumer multi-purpose solvents, including a sell-through period designed to address stranded inventory concerns;
- Provide an alternative PW-MIR compliance pathway; and
- Streamline rule structure, add new definitions, and remove outdated rule provisions.

Despite offering alternative limits using PW-MIR, no increase in ozone formation is expected as a result of the proposed amendments to the rule.

CHAPTER 1 : BACKGROUND

INTRODUCTION

REGULATORY HISTORY

COMPARATIVE TOXICITY CONTEXT FOR pCBtF AND t-BAc

AFFECTED INDUSTRIES

PROCESS DESCRIPTION

PUBLIC PROCESS

Introduction

Rule 1143 is a source-specific rule adopted on March 6, 2009, and aims to reduce emissions of VOCs from the use, storage, and disposal of consumer paint thinners and consumer multi-purpose solvents commonly used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations. Rule 1143 establishes VOC content limits and applies to any person who supplies, sells, offers for sale, or manufactures consumer paint thinners and consumer multi-purpose solvents for sale in the South Coast AQMD, as well as any person who uses or solicits the use of any consumer paint thinners and consumer multi-purpose solvents within the South Coast AQMD for personal, family, household, or institutional use.

In response to stricter VOC limits, some manufacturers relied on exempt solvents, most notably pCBtF, because their use does not contribute to the calculated VOC content of a product. In April 2017, the South Coast AQMD Stationary Source Committee recommended a precautionary approach when considering exempt compounds with potential toxic endpoints, prioritizing reductions in toxic exposure over further reductions in VOC emissions. OEHHA identified toxic endpoints for both pCBtF and t-BAc. In response, South Coast AQMD has been working to phase out or minimize the use of these exempt compounds across all VOC rules.

For Rule 1143, the current rule development has two primary goals: (1) to phase out the use of pCBtF and t-BAc wherever feasible, and (2) to maintain existing VOC limits while providing an alternative reactivity-based compliance pathway that supports reformulation without reliance on toxic exempt solvents.

To support this effort, staff conducted a manufacturer survey starting on August 12, 2025. A total of 18 products (combining some products in different package sizes) were reported to be sold within the South Coast AQMD jurisdiction, including two consumer paint thinners and four consumer multi-purpose solvents currently formulated with pCBtF. No reported products contained t-BAc. Approximately 88 percent of reported products were solvent-based, and products containing pCBtF accounted for approximately 14 percent of reported sales volume. Reported pCBtF content ranged from approximately 3 to 30 percent by weight, depending on category and formulation. More information from the survey can be found in Chapter 2.

Regulatory History

Rule 1143 was adopted on March 6, 2009, to implement a two-tier VOC concentration limit beginning with a 300 grams per liter (g/L) VOC limit, effective January 1, 2010, followed by a final 25 g/L VOC limit, effective January 1, 2011. The rule was amended on June 4, 2010, to rescind the final VOC limit of 25 g/L, to comply with a court order issued by the Los Angeles County Superior Court. On July 9, 2010, Rule 1143 was amended again to reinstate the final 25 g/L VOC limit for both consumer paint thinners and consumer multi-purpose solvents, effective January 1, 2011.

The rule has not been updated since 2010. In recent years, a list of South Coast AQMD VOC rules have been amended to phase out pCBtF and t-BAc following OEHHA's identification of their toxic endpoints. PAR 1143 continues this agency-wide effort and establishes a compliance structure that maintains current VOC limits while addressing exempt-solvent toxicity.

Background on t-BAc and pCBtF

In 1994, United States Environmental Protection Agency (U.S. EPA) exempted pCBtF from the federal definition of a VOC due to its negligible photochemical reactivity. South Coast AQMD incorporated this exemption.

In 2004, U.S. EPA similarly exempted t-BAc; however, South Coast AQMD did not grant a full exemption under Rule 102 due to toxicity concerns, instead allowing limited exemptions through source-specific rules such as Rule 1113 – Architectural Coatings (Rule 1113) and Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations (Rule 1151).

In 2014, VOC rule development was put on hold due to toxicity concerns of t-BAc and Dimethyl Carbonate (DMC). Staff held a Toxic Symposium¹ in October 2014 to discuss several topics including concerns of toxic tradeoffs in achieving VOC emission reductions. In February 2016, the Governing Board directed staff through the resolution for Proposed Amended Rule 1113 to re-evaluate the partial t-BAc exemptions, after which, staff developed a draft “tBAC Assessment White Paper.”² In January 2018, staff presented the findings on t-BAc to the Stationary Source Committee (SSC), including concerns regarding pCBtF, and the SSC subsequently directed staff to remove t-BAc exemptions and to evaluate pCBtF for potential carcinogenicity.

OEHHA finalized the t-BAc health risk assessment in 2018, concluding that its cancer risk was higher than previously estimated, and finalized the pCBtF assessment in 2020, identifying pCBtF as a potential carcinogen. In response, South Coast AQMD has taken action to prohibit these compounds through amendments to Rule 1168 – Adhesive and Sealant Applications in 2022, Rule 1151 in 2024, Rule 1171 – Solvent Cleaning Operations in 2025, Rule 1107 – Coating of Metal Parts and Products in 2025, Rule 1124 – Aerospace Assembly and Component Manufacturing Operations in 2026, Rule 1144 – Metalworking Fluids and Direct-Contact Lubricants in 2026, and Rule 1136 – Wood Products Coatings in 2026.

Comparative Toxicity Context for pCBtF and t-BAc

Staff evaluated several regulatory approaches to address toxicity concerns associated with pCBtF and t-BAc, informed by how other compounds with identified toxic endpoints have historically been addressed under South Coast AQMD rules. Under Rule 102, VOC-exempt compounds may be designated as Group II and restricted in source-specific rules when health or safety concerns are identified.

To support this evaluation, staff reviewed available toxicological benchmarks, including cancer potency and acute exposure indicators, to place pCBtF and t-BAc in context with other solvents that have been restricted or prohibited. This review was conducted during the 2022 Rule 1168 amendment, the first VOC rule to be amended after the health risk assessments for t-BAc and pCBtF were finalized, and indicated pCBtF exhibits relatively elevated cancer risk potential, while t-BAc presents concerns related to short-term exposure, consistent with prior staff and OEHHA findings.

Based on this comparative assessment, staff determined that continued reliance on pCBtF and t-BAc is inconsistent with the South Coast AQMD’s precautionary approach for toxic exempt

¹ <https://www.aqmd.gov/home/rules-compliance/compliance/vocs/exempts/toxic-symp>

² <https://www.aqmd.gov/home/rules-compliance/compliance/vocs/exempts/tbac-assessment>

compounds. Accordingly, PAR 1143 proposes to prohibit pCBtF and t-BAc to align with prior rulemakings and balance public health protection with feasible industry transition.

For Rule 1143, staff conducted a manufacturer survey in 2025. The survey showed:

- Six products are formulated with pCBtF; and
- Zero products utilize t-BAc.

These findings support the need for a prohibition schedule while maintaining existing VOC limits.

Affected Industries

Rule 1143 applies to any person who supplies, sells, offers for sale, or manufactures consumer paint thinners and consumer multi-purpose solvents for sale in the South Coast AQMD, as well as any person who uses or solicits the use of any consumer paint thinners and multi-purpose solvents within the South Coast AQMD for personal, family, household, or institutional use. Paint thinners and multi-purpose solvents for other uses (e.g., applications in shops and factories) are subject to Rule 1171 or other VOC rules. The affected industries for PAR 1143 include:

- Consumer paint thinner manufacturers;
- Consumer multi-purpose solvent manufacturers;
- Consumers;
- Institutions.

To characterize the use of exempt solvents and determine applicability, staff conducted a manufacturer survey that informed the development of the prohibition schedule and PW-MIR limits. This survey-based approach ensures that proposed amendments reflect current market conditions and allow for feasible reformulation pathways. The amendments proposed in PAR 1143 are expected to affect all manufacturers producing such products for distribution in the South Coast Air Basin, as well as end users of these products.

Process Description

As VOC limits tightened over time, manufacturers reformulated products to maintain product performance while complying with regulatory requirements. In several categories, exempt solvents, primarily pCBtF, were incorporated because they do not contribute to calculated VOC content. The compounds pCBtF and t-BAc are not currently used to any significant extent in consumer paint thinners and consumer multi-purpose solvents, and stakeholders have indicated that they do not anticipate substantial impacts on the marketplace for these products.

Under PAR 1143, existing VOC limits are maintained. For both product categories, consumer paint thinners and consumer multi-purpose solvents, there are products already in the market that could serve as direct replacements for those formulated with pCBtF. The proposal also allows compliance flexibility while reducing reliance on toxic exempt solvents when manufacturers reformulate their products.

Public Process

The rule amendment process for PAR 1143 began in August 2025. Staff conducted two Working Group Meetings and held multiple individual meetings with manufacturers. In addition, a public workshop is scheduled for August 4, 2026. To support the technical assessment, staff distributed

a manufacturer survey requesting formulation data, including VOC content, exempt solvent usage, and reactivity information. The table below summarizes the key topics discussed at each of the Working Group Meetings; presentations from those meetings are posted on the South Coast AQMD website.³

Table 1-1: Working Group Meetings

Meeting title	Date	Highlights
Working Group Meeting #1	August 12, 2025	• Exempt solvent background • Manufacturer survey
Working Group Meeting #2	June 17, 2026	• Rule and exempt solvent background • Key amendment objectives • Manufacturer survey data • Initial rule concepts • Initial preliminary draft rule language

As part of the PAR 1143 rule development process, staff met with manufacturers to further evaluate the survey data and gain a clearer understanding of industry practices. These meetings focused on clarifying manufacturer survey responses, assessing the extent of pCBtF and t-BAC usage, and discussing technical and operational challenges associated with prohibiting these compounds. Staff also discussed potential alternative compliance approaches and reformulation options, including the use of reactivity-based VOC limits.

³ <https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-1143>

CHAPTER 2 : TECHNOLOGY ASSESSMENT

VOC CONTROL

PW-MIR COMPLIANCE PATHWAY

VOC Control

Rule 1143 establishes VOC content limits for consumer paint thinners and consumer multi-purpose solvents as the primary mechanism for controlling emissions. Due to VOC limits under Rule 1143, manufacturers reformulated products to maintain performance while reducing the VOC content. Some manufacturers used compounds exempted from the regulatory definition of VOC to further reduce calculated VOC content while preserving solvent-based performance characteristics. Two exempt solvents, pCBtF and t-BAc, were used in some products because they provided favorable evaporation rates and solvency without counting toward the VOC limits. While the use of exempt solvents facilitated compliance with mass-based VOC limits, subsequent toxicological evaluations identified health concerns associated with certain exempt compounds. These findings prompted a shift in regulatory focus from solely controlling ozone precursor emissions to also addressing potential toxic exposure risks associated with exempt-solvent use.

Rule 1143 has a current VOC limit of 25 g/L, which is more stringent when compared to the CARB Consumer Product Regulation. While staff is not recommending lowering the current VOC limits, PAR 1143 is designed to reduce reliance on exempt solvents with identified toxic endpoints, pCBtF and t-BAc, while offering an alternative pathway for flexibility which would not raise the VOC limit.

To support this effort, staff conducted a manufacturer survey to characterize current formulation practices across categories. Survey responses for consumer paint thinners and consumer multi-purpose solvents indicated that six products currently rely on pCBtF in their formulations, while no categories were identified as using t-BAc.

These findings informed the development of a regulatory approach that focuses on eliminating the use of pCBtF and t-BAc while preserving compliance flexibility and minimizing disruption to the marketplace.

PAR 1143 is structured to allow different compliance pathways, including PW-MIR, while phasing out the use of pCBtF and t-BAc.

PW-MIR Compliance Pathway

The Maximum Incremental Reactivity (MIR) scale is a metric that measures the relative ozone-forming potential of VOCs that quantifies the amount of ground-level ozone formed by a specific chemical compound under high-reactivity conditions. While traditional mass-based VOC limits treat all VOCs equally on a mass-per-volume basis, the MIR scale accounts for the varying chemical reactivities of individual compounds. By assigning a specific reactivity value to each VOC, this metric allows for a more precise assessment of a product's actual atmospheric impact and its contribution to ozone formation.

A key component of the amended rule is the introduction of an alternative PW-MIR compliance pathway. PW-MIR is a reactivity-based metric that reflects the ozone-forming potential of a product based on the weighted reactivity of all VOC ingredients in the formulation. Under PAR 1143, the PW-MIR pathway is optional, aligns with Rule 1171, and does not replace or modify the existing VOC content limits.

MIR values used to calculate PW-MIR are published by CARB and represent the relative ozone-forming potential of individual VOCs. PW-MIR is calculated by weighting each VOC's MIR value by its proportion in the product formulation, resulting in a single metric that represents the overall

ozone-forming potential of the product. This approach allows the rule to distinguish between VOCs with substantially different reactivities rather than treating all VOCs equally on a mass basis.

This approach provides manufacturers with additional reformulation flexibility by allowing substitution of lower-toxicity VOCs with known reactivity characteristics, rather than relying on exempt solvents. By maintaining existing VOC limits and offering PW-MIR as an alternative pathway, the rule avoids backsliding while supporting feasible transitions away from toxic exempt compounds.

PW-MIR has been used in prior South Coast AQMD rulemakings, including Rules 1151, 1171, 1124, 1144, and 1136, to support equivalent or greater ozone protection while providing flexibility during reformulation. Consistent with those rules, PW-MIR under PAR 1143 is offered as an alternative compliance option and is designed to achieve equal or lower ozone formation compared to traditional mass-based VOC limits.

In summary, PAR 1143:

- Maintains existing mass-based VOC limits;
- Establishes a prohibition schedule for pCBtF and t-BAc with a sell-through provision; and
- Introduces alternative PW-MIR VOC limits.

This proposal balances public health protection with technical feasibility, allowing consumer paint thinners and consumer multi-purpose solvents to transition away from toxic exempt solvents while maintaining product performance and regulatory compliance.

Manufacturer pCBtF and t-BAc Survey

To understand the extent of the use of pCBtF and t-BAc to comply with the VOC limits in Rule 1143, staff conducted a survey, in August 2025, of manufacturers who sell consumer paint thinners and consumer multi-purpose solvents subject to Rule 1143. The main compounds of interest in the survey were pCBtF and t-BAc. The results of the survey were used to help evaluate VOC content limits, VOC emissions, a potential prohibition timeline, and future effective VOC content limits. The following table shows the survey questions.

Table 2-1: Survey Questions

Requested Information	
1.	Company name, contact person, contact information
2.	Product name
3.	Product category
4.	VOC content of product
5.	If the product is water or solvent based
6.	Percent content of pCBtF and/or t-BAc
7.	Annual sold volume and if that volume represents South Coast AQMD or California
8.	Optional: PW-MIR (g O ₃ /g Product)

Two manufacturers of consumer paint thinners and consumer multi-purpose solvents responded to the survey distributed as part of the PAR 1143 rule development process. The following summarizes the major findings of the survey:

- A total of 18 consumer paint thinners and consumer multi-purpose solvents, combining different sizes, were reported to be sold within the South Coast AQMD jurisdiction. The table below summarizes the main product categories identified in the survey and the number of products reported within each category.

Table 2-2: Summary of the Number of Products Reported in Survey

Category	# of Products Reported
Consumer Paint Thinners	5
Consumer Multi-Purpose Solvents	13
Total	18

- Survey responses indicated that six of the reported products contained products formulated with pCBtF. No products were reported to contain t-BAc.
- Approximately 88 percent of reported products were solvent-based, and products containing pCBtF accounted for approximately 14 percent of reported sales volume.
- Reported pCBtF content ranged from approximately 3 to 30 percent by weight, depending on category and formulation.

The survey responses formed the basis for staff's evaluation of compliance approaches under PAR 1143.

Paint thinners and multi-purpose solvents for other uses (e.g., applications in shops and factories) are subject to Rule 1171 or other VOC rules. The VOC limits in Rule 1171 vary by category. The alternative MIR limit in Rule 1171 is a PW-MIR limit of 0.38 g O₃/g VOC for any solvent cleaning activity, provided the solvent cleaning materials comply with the labeling provision.

Under PAR 1143:

- Existing mass-based VOC limits remain unchanged;
- PW-MIR VOC limits are optional;
- Manufacturers may comply with either the mass-based VOC limit or the PW-MIR VOC limit; and
- PW-MIR VOC limits allow substitution of lower-toxicity VOCs without increasing ozone impacts.

PW-MIR VOC limits are a newer compliance approach for South Coast AQMD VOC rules, and staff will monitor implementation and market response over time. The table below shows the range of PW-MIR VOC content from the manufacturer survey responses for PAR 1143 products that meet with the current VOC limit in Rule 1143. The sales weighted average MIR is 0.36 g O₃/g product.

Table 2-3: Summary of PW-MIR VOC Content Values and Existing VOC Limits

Product Category	PW-MIR VOC Content (g O ₃ /g Product)	Existing VOC Limit (g/L)
Consumer Paint Thinners and Consumer Multi-Purpose Solvents	0 - 0.43	25

PAR 1143 proposes a future effective prohibition on consumer paint thinners and consumer multi-purpose solvents containing pCBtF and t-BAC. Based on stakeholder input and market considerations, staff proposes a structured transition that includes:

- A future manufacturing prohibition date; and
- A sell-through period for products already in the supply chain.

These provisions are intended to minimize stranded assets while allowing sufficient time for reformulation and transition.

Table 2-4: Proposed Prohibition Schedule

Category	Final Manufacture Date	Sell-Through Date
Consumer Paint Thinners and Consumer Multi-Purpose Solvents	July 1, 2027	July 1, 2029

CHAPTER 3 : SUMMARY OF PROPOSALS

INTRODUCTION

PROPOSED AMENDED RULE STRUCTURE

PROPOSED AMENDED RULE 1143

Introduction

The main objective of the proposed amendments to Rule 1143 is to phase out the use of pCBtF and t-BAc, as directed by the South Coast AQMD's Stationary Source Committee, due to toxicity concerns.

Staff is proposing the following amendments to Rule 1143. The proposed amendments primarily pertain to the prohibition of pCBtF and t-BAc use in the regulated products and the introduction of an alternative compliance pathway, including the use of reactivity-based VOC limits. Some other amendments are for the purpose of rule clarification or streamlining. The proposed revised rule structure and key provisions are discussed in the following sections.

Proposed Amended Rule Structure

- (a) Purpose
- (b) Applicability
- (c) Definitions
- (d) Requirements
- (e) Labeling Requirements
- (f) Reporting and Recordkeeping Requirements
- (g) Information Exempt from Disclosure
- (h) Test Methods
- (i) Exemptions
- (j) Severability

Proposed Amended Rule 1143

Purpose [Subdivision (a)]

The purpose of this rule is to reduce VOC emissions from the use, storage, and disposal of consumer paint thinners and consumer multi-purpose solvents commonly used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content.

Staff capitalized defined terms to indicate that definitions for the associated terms can be found in the Definitions subdivision.

Applicability [Subdivision (b)]

Subdivision (b) updates the applicability section to align with the structure and terminology used in other South Coast AQMD VOC rules. The revisions clarify that PAR 1143 applies to any person who supplies, sells, offers for sale, manufactures, markets, blends, distributes, packages, or repackages consumer paint thinners and consumer multi-purpose solvents for use in the South Coast AQMD, as well as any person who uses or solicits the use of any consumer paint thinners and consumer multi-purpose solvents within the South Coast AQMD.

Staff updated applicability for consistency across other VOC rules. Staff also capitalized defined terms to indicate that definitions for the associated terms can be found in the Definitions subdivision.

Definitions [Subdivision (c)]

To provide clarity, definitions are used in the proposed amended rule as a proper noun to better distinguish defined terms from common terms. Refer to PAR 1143 for a complete list of definitions.

The following are new or revised definitions for PAR 1143:

The definition for chemical abstracts service registration number or CAS RN is added to provide clarification.

“CHEMICAL ABSTRACTS SERVICE REGISTRATION NUMBER or CAS RN means a unique numerical identifier assigned by the Chemical Abstracts Service to a single chemical substance to ensure unambiguous identification.”

The definition for maximum incremental reactivity (MIR) and definition for product-weighted MIR (PW-MIR) are added to support the introduction of reactivity-based compliance options.

“MAXIMUM INCREMENTAL REACTIVITY (MIR) means the measure 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 values for individual VOCs are specified in Title 17, California Code of Regulations Sections 94700 and 94701.”

“PRODUCT-WEIGHTED MIR (PW-MIR) means the sum of all weighted MIR for all ingredients in a product. 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 × Weight Fraction ingredient

and

PW-MIR = (Wtd-MIR)₁ + (Wtd-MIR)₂ + ... + (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.”

The following definitions are added for clarification.

“EXECUTIVE OFFICER is as defined in Rule 102 – Definition of Terms (Rule 102).”

“PRINCIPAL DISPLAY PANEL means that part, or those parts of a label that are so designed as to most likely be displayed, presented, shown, or examined under normal and customary conditions of display or purchase.”

“SOUTH COAST AQMD TEST METHOD means a test method included in the manual of “Laboratory Methods of Analysis for Enforcement Samples,” which can be found on the South Coast AQMD website and are referenced in subdivision (h).”

The definition for VOC content is revised to support the introduction of reactivity-based compliance options.

“VOC CONTENT means the total weight of VOC in a product expressed ~~as a percentage of the product weight or~~ as a mass-based concentration expressed in grams per liter of material (g/L_

Material) or pounds per gallon (lb/Gal) or the PW-MIR VOC content expressed as g O₃/g Product.”

The following list of definitions are revised for clarification without changing the original intent.

- Consumer multi-purpose solvents
- Formulation data
- Grams of VOC per liter of material
- Person

The definition for consumer multi-purpose solvents does not include paint strippers. Consumer multi-purpose solvents for painting clean-up are not intended for paint stripping that removes cured coatings, cured inks, and/or cured adhesives.

Requirements [Subdivision (d)]

This subdivision contains the provisions for any person that supplies, sells, offers for sale, manufactures, markets, blends, distributes, packages, or repackages any consumer paint thinner or consumer multi-purpose solvent for use in the South Coast AQMD.

Paragraph (d)(1) – VOC Limits

Paragraph (d)(1) establishes VOC content limits, as specified in Table 1 – VOC Content Limits (Table 1). Staff is not proposing to modify the existing mass-based VOC content limits.

Table 3-1: Summary of the VOC Limits

CATEGORY	Actual VOC Limit	
	g/L-Material	lb/Gal-Material
Consumer Paint Thinner	25	0.21
Consumer Multi-Purpose Solvent	25	0.21

Paragraph (d)(2) – PW-MIR

Consumer paint thinners and consumer multi-purpose solvents must comply with either the applicable VOC limits specified in Table 1 or may comply with the alternative PW-MIR VOC limits specified in this paragraph. PW-MIR value is determined by the equation specified in its definition based on the weight fraction and MIR for each ingredient. MIR values for individual VOCs are specified in Title 17, California Code of Regulations, Sections 94700 and 94701.

The alternative PW-MIR compliance pathway provides an additional compliance option while maintaining equivalent ozone-forming potential compared to the existing mass-based VOC limits. This compliance flexibility is needed for implementing the proposed prohibition for pCBtF and t-BAc.

The proposed PW-MIR aligns with the Rule 1171 alternative PW-MIR VOC limit for solvents. Manufacturers support this approach.

Table 3-2: Table of MIR VOC Limit

Category	PW-MIR Limit (g O ₃ /g Product)
Consumer Paint Thinners and Consumer Multi-Purpose Solvents	0.38

Paragraph (d)(3) – Prohibition

Subparagraph (d)(3)(A) streamlines the existing general prohibition for Group II exempt compounds as specified in existing Rule 1143 paragraph (d)(5) and removes the exception for cyclic, branched, or linear, completely methylate siloxanes (VMS). As part of this rulemaking, staff received a comment letter from stakeholders who asked to continue the VMS exception in PAR 1143. The comment letter noted that although VMS are not presently used in the applicable products, they may serve as viable alternatives in the future. Because PAR 1143 applies to products used by consumers, not products used in an industrial setting where personal protection equipment may be used, staff strongly recommends taking a precautionary approach. Staff also confirmed with manufacturers that VMS are not currently used in their products. Several VMS compounds have been banned by the European Union in personal care products. The U.S. EPA has also conducted a draft risk evaluation under the Toxic Substances Control Act for a type of VMS product, with preliminary determinations indicting unreasonable risk to workers in manufacturing and industrial use and to consumers through certain conditions of use. Staff recognizes that a precautionary approach is more health protective, especially for a rule that applies to consumer products, and it is preferable to proactively prohibit a potentially toxic substance before manufacturers use it to comply with VOC limits. A strong example of that is t-BAC, where due to the suspected toxicity, staff took a measured approach only allowing limited exemptions. Manufacturers did not rely heavily on t-BAC and its phase out has been much easier than that of pCBtF, where a full exemption was provided and its use became ubiquitous. Knowing there are potential concerns with VMS, staff recommends not allowing for their use in consumer products subject to this rule.

Subparagraph (d)(3)(B) includes a new provision for any person that supplies, sells, offers for sale, manufactures, markets, blends, distributes, packages, or repackages any consumer paint thinners and consumer multi-purpose solvents containing the specified toxic exempt compounds pCBtF and t-BAC. Staff initially proposed a prohibition date of December 31, 2026. Staff later delayed the prohibition date to July 1, 2027, to address stakeholders' comment stating the December 2026 prohibition deadline did not provide manufacturers sufficient time to adjust their product lines. The delayed prohibition date will allow manufacturers additional time to ensure no products containing pCBtF or t-BAC are sold into or within the South Coast AQMD.

Paragraph (d)(4) – Sell-Through

Paragraph (d)(4) establishes a sell-through provision for consumer paint thinners and consumer multi-purpose solvents manufactured prior to the applicable final manufacture dates. These provisions allow materials containing pCBtF and/or t-BAC that were manufactured before the prohibition date to be sold through the supply chain until the applicable sell-through date specified in this paragraph. This phased approach is intended to prevent stranded inventory while ensuring an orderly transition to compliant products. Consumer products may flow through the distribution chain slower than commercial products. Staff initially proposed a sell-through date of December

31, 2027. Staff delayed the sell-through date to July 1, 2029, to address stakeholders' comments requesting a longer timeframe. Rule 1143 regulates consumer products, which may take longer to sell than commercial or industrial coatings and solvents. To address the slower sales rate and to minimize impacts on the supply chain, staff agreed to increase the sell-through period to two years from the prohibition date.

Table 3-3 summarizes the prohibition schedule, including the final manufacture and sell-through dates.

Table 3-3: Prohibition Schedule

Category	Final Manufacture Date	Sell-Through Date
Consumer Paint Thinners and Consumer Multi-Purpose Solvents	July 1, 2027	July 1, 2029

Labeling Requirements [Subdivision (e)]

Subdivision (e) introduces new and modifies existing provisions that establish labeling requirements necessary to ensure compliance with the VOC limits and the alternative compliance option under Rule 1143.

Paragraph (e)(3) includes a new provision for additional labeling requirements for consumer paint thinners and consumer multi-purpose solvents that elect to comply with the alternative PW-MIR VOC limit. For these materials, manufacturers and suppliers are required to include the PW-MIR VOC content, expressed as grams of ozone per gram of product (g O₃/g product), on all containers to facilitate compliance and enforcement. This paragraph also streamlines some existing requirements from other existing provisions, such as the requirement for displaying maximum VOC content after any dilution as recommended by the manufacturer.

Paragraph (e)(4) is the existing requirement for displaying the date of manufacture or a date code indicating the date of manufacture.

Paragraphs related to reporting and recordkeeping in this subdivision are streamlined under subdivision (f).

Reporting and Recordkeeping Requirements [Subdivision (f)]

Subdivision (f) contains existing provisions for reporting and recordkeeping requirements necessary to ensure compliance with Rule 1143. Provisions from existing rule subdivisions (e) and (g) are consolidated and streamlined under subdivision (f).

Information Exempt from Disclosure [Subdivision (g)]

Subdivision (g) includes existing requirements and was revised to reflect the updated code sections for the California Public Records Act.

Test Methods [Subdivision (h)]

Subdivision (h) includes existing provisions for test methods. South Coast AQMD Test Method 313 was added to align with other VOC rules. Staff streamlined and reorganized provisions for clarity.

Exemptions [Subdivision (i)]

Subdivision (i) provides existing conditional exemptions from specific requirements of Rule 1143. Rule language for products excluded from the defined consumer multi-purpose solvents was removed from the definition subdivision and reorganized to fit under subparagraph (i)(1)(B).

Severability [Subdivision (j)]

Subdivision (j) contains an existing provision for severability. If any provision is invalidated by a judicial order, such order will not affect the implementation of the remainder of the rule according to this rule provision.

CHAPTER 4 : IMPACT ASSESSMENT

EMISSION IMPACTS

COSTS

SOCIOECONOMIC IMPACT ASSESSMENT

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

DRAFT FINDINGS UNDER THE HEALTH AND SAFETY CODE

COMPARATIVE ANALYSIS

Emission Impacts

PAR 1143 establishes a prohibition and compliance schedule for the phase out of pCBtF and t-BAc while maintaining the existing mass-based VOC limits. PAR 1143 also introduces an alternative PW-MIR VOC limit to provide manufacturers with an additional compliance pathway and formulation flexibility during the transition away from the use of the toxic compounds pCBtF and t-BAc. Because the existing mass-based VOC limits are not being changed and the PW-MIR limit is designed to be an equivalent alternative to the current VOC limits, no increase in ozone formation is expected as a result of the proposed amendments to the rule.

PAR 1143 affects manufacturers, product supply chains, and end users including consumers and institutions. This rule does not apply to permitted facilities other than permitted institutions. Manufacturer survey data indicate that pCBtF is used to meet current VOC limits in six products. Approximately 14 percent of total reported sales volume within the South Coast AQMD contain pCBtF, with reported pCBtF content ranging from 3 to 30 percent by weight. No use of t-BAc was reported in the survey responses. Two manufacturers reported a total of six products with pCBtF sold within the South Coast AQMD.

PAR 1143 does not propose any changes to the existing VOC content limits. Staff does not expect changes in ozone potential by the proposed alternative PW-MIR VOC limit.

Table 4-1: Estimated VOC Emissions by Category Reported in Manufacturer Survey

Category	Emissions (tons per day)
Consumer Paint Thinners	0.16
Consumer Multi-Purpose Solvents	0.01
Total	0.17

Costs

Staff does not anticipate any costs associated with the proposed changes to PAR 1143 since there are only a few products with a small market share using pCBtF in their formulations and those products already have direct replacements. In addition, PAR 1143 provides flexibility through the alternative PW-MIR compliance pathway.

Socioeconomic Impact Assessment

A socioeconomic impact assessment will be conducted and released for public review and comment at least 30 days prior to the South Coast AQMD Governing Board Hearing on PAR 1143, which is scheduled for October 2, 2026 (subject to change).

California Environmental Quality Act (CEQA)

Pursuant to CEQA and South Coast AQMD's certified regulatory program (Public Resources Code Section 21080.5, CEQA Guidelines Section 15251(l), and South Coast AQMD Rule 110), the South Coast AQMD, as lead agency, is currently reviewing the proposed project (PAR 1143) to determine if it will result in any potential adverse environmental impacts. Appropriate CEQA documentation will be prepared based on the analysis.

Draft Findings Under the Health and Safety Code

Health and Safety Code Section 40727 requires that prior to adopting, amending, or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, nonduplication, and reference, as defined in that section, based on relevant information presented at the hearing, this written analysis, and the rulemaking record. The draft findings are as follows:

Necessity – PAR 1143 is needed to phase out two exempt compounds, pCBtF and t-BAc, to reduce toxicity in consumer paint thinners and consumer multi-purpose solvents, and to partially implement the 2022 AQMP Control Measure CTS-01.

Authority – The South Coast AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections 39002, 39650 *et seq.*, 40000, 40001, 40440, 40702 and 41508.

Clarity – PAR 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, is written and displayed so that the meaning can be easily understood by persons directly affected by it.

Consistency – PAR 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or federal and state regulations.

Nonduplication – PAR 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, does not impose the same requirement as any existing state or federal regulation, and the proposed amendments are necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

Reference – In amending this rule, the South Coast AQMD Governing Board references the following statutes which the South Coast AQMD hereby implements, interprets, or makes specific: Health and Safety Code Sections 40001, 40440, and 40702.

Comparative Analysis

Health and Safety Code Section 40727.2(a) requires the South Coast AQMD to prepare a written analysis of existing federal air pollution control requirements applicable to the same source type being regulated whenever it adopts or amends a rule. When a proposed amended rule or regulation does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements, a comparative analysis is not required. PAR 1143 does not impose such requirements. Beyond what is required under Health and Safety Code Section 40727.2(g), Chapter 2 of this staff report provides background on PW-MIR. PW-MIR is not currently used in federal air pollution control requirements, so providing a matrix comparison or comparative analysis will not yield further information.