

Proposed Amended Rule 1171 Solvent Cleaning Operations

**Public Workshop
March 28, 2025**



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Agenda

Rule 1171 Background

Rule Language Overview

Emissions Impacts

Socioeconomic Impacts

California Environmental Quality Act (CEQA)

Next Steps

Rule 1171 Background

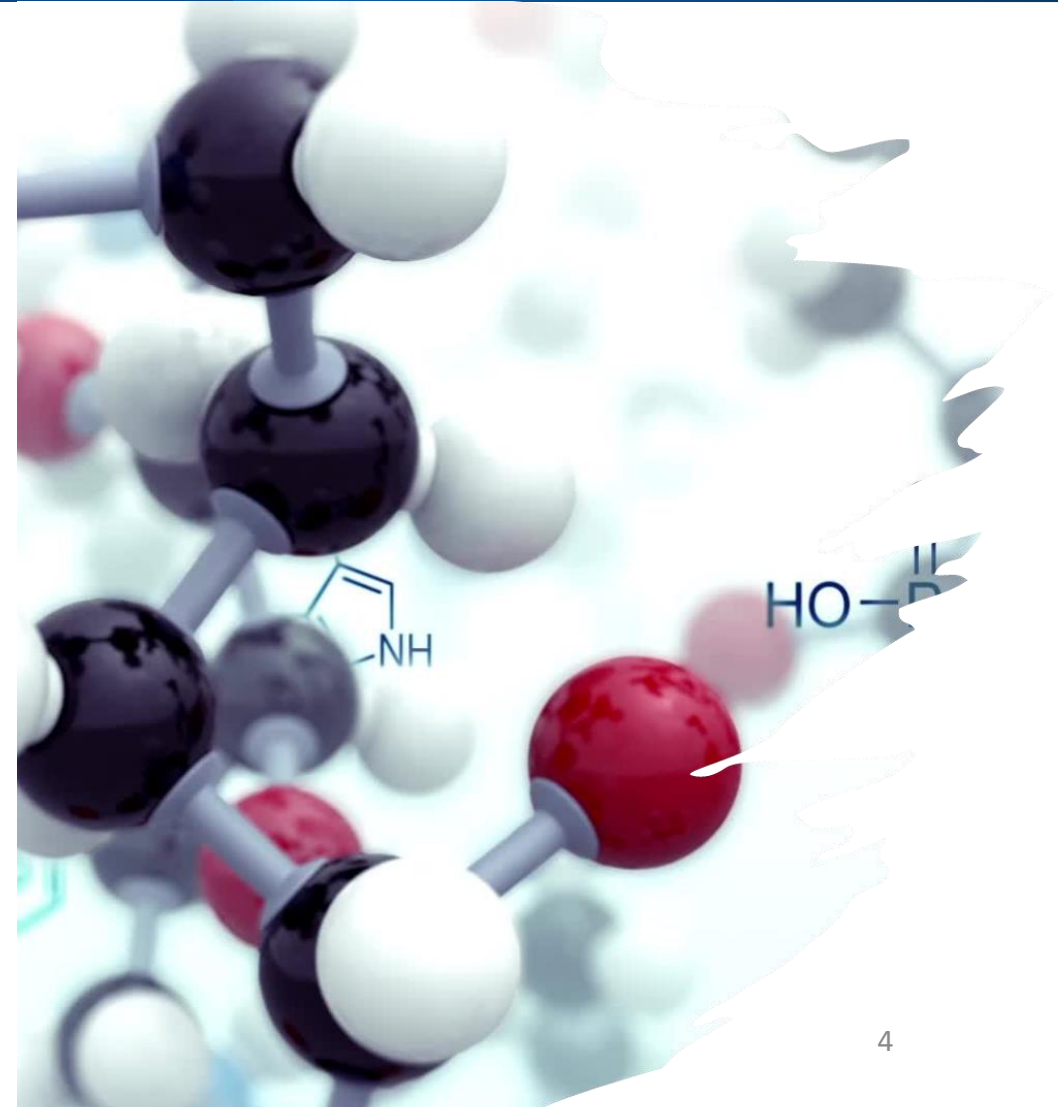
- Adopted in August 1991 to limit VOC emissions from solvent cleaning operations
- Applicable to:
 - Users and suppliers of solvents used as part of a cleaning operation
 - Cleaning operations where solvents are used
 - Wide array of industries including textiles, electronics, chemical, lumber, printing, metal, and other miscellaneous manufacturing
- Last amended in May 2009 to extend compliance date for certain operations and exempt certain small-usage, low-emissions applications

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS*	EFFECTIVE 1/1/2010
	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

* The specified limits remain in effect unless revised limits are listed in subsequent columns.

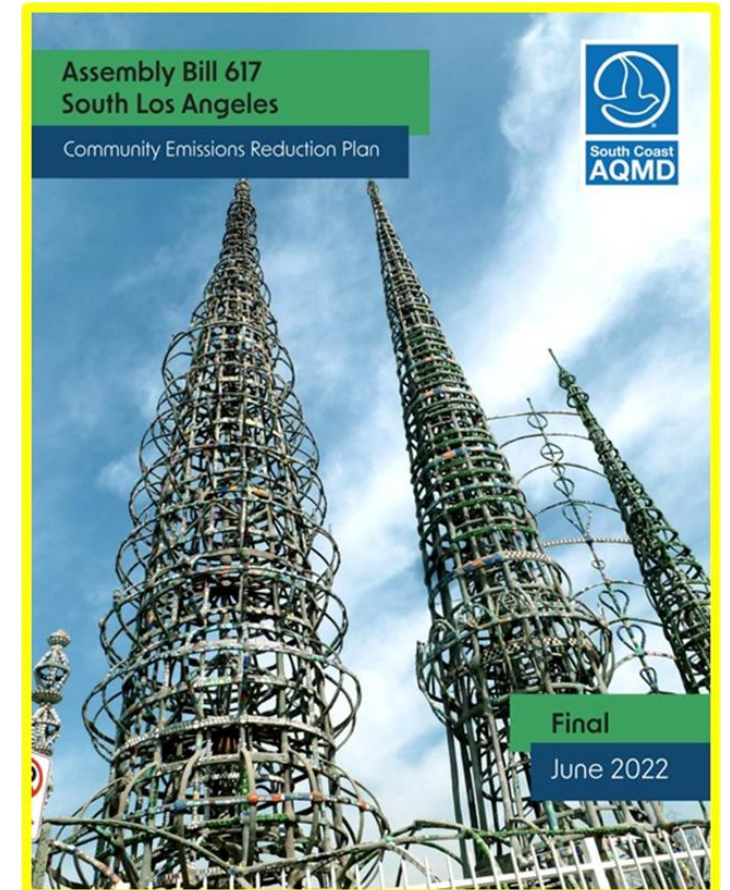
Exempt Compounds and Toxicity

- Certain solvents are defined as exempt from the definition of a VOC by the U.S. EPA if they are negligibly photochemically reactive
 - Defined as less reactive than ethane
- U.S. EPA does not consider toxicity when making their designation
- California Office of Environmental Health Hazard Assessment deemed pCBtF and t-BAC as potential carcinogens
- Stationary Source Committee directed staff to prioritize reducing toxicity even if VOC emissions increase
- Rule 1151 and Rule 1168 sets path for phase out and prohibits the use of pCBtF and t-BAC



Rule Amendment Objectives

- Rule development initiated in response to:
 - South Coast AQMD Stationary Source Committee directive to prioritize reducing exposure to toxic solvents, such as tert-butyl acetate (t-BAC) and para-chlorobenzotrifluoride (pCBtF)
 - Assembly Bill 617, which requires agencies to establish community-focused and community-driven plans to reduce air pollution and improve public health in designated environmental justice communities
 - South Los Angeles Community Emission Reduction Plan includes reducing emissions from auto body shops
 - Address stakeholder concern regarding solvent availability for critical cleaning at water and electricity distribution operations
 - Evaluate solvent cleaning materials that potentially containing exempt compounds



Rule Language Overview

Rule Structure Updates and Overview

- Changes made to rule structure for consistency
- Restructuring of provisions for consistency
- Moved Applicability, Alternative Compliance Options, and Recordkeeping Requirements into separate individual subdivisions

Proposed Amended Rule 1171

- (a) Purpose
- (b) Applicability
- (c) Definitions
- (d) Requirements
- (e) Alternative Compliance Options
- (f) General Prohibitions
- (g) Recordkeeping Requirements
- (h) Test Methods
- (i) Rule 442 Applicability
- (j) Exemptions

Subdivision (a) – Purpose and Subdivision (b) – Applicability

- Separated subdivisions to be consistent with structure of other South Coast AQMD rules

(a) ~~Purpose and Applicability~~

The purpose of this rule is to reduce emissions of ~~volatile organic compounds~~ Volatile Organic Compounds (VOCs), toxic air contaminants, and stratospheric ozone-depleting ~~compounds, or~~ and global-warming compounds from the use, storage and disposal of ~~solvent cleaning materials~~ Solvent Cleaning Materials in ~~solvent cleaning operations and activities~~ Solvent Cleaning Operations or Solvent Cleaning Activities. ~~A solvent cleaning operation is solvent cleaning conducted as part of a business. This rule applies to: all persons who use these solvent materials in solvent cleaning operations during the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas; all persons who store and dispose of these materials used in solvent cleaning operations; and all solvent suppliers who supply, sell, or offer for sale solvent cleaning materials for use in solvent cleaning operations.~~

(b) Applicability

This rule is applicable to any Person who uses Solvent Cleaning Materials in Solvent Cleaning Operations or Solvent Cleaning Activities during the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas as part of a business or public service within the South Coast AQMD. The rule shall also apply to all Persons who store and dispose of Solvent Cleaning Materials used in Solvent Cleaning Activities; and all Solvent Cleaner Suppliers who supply, sell, or offer for sale Solvent Cleaning Materials for use in Solvent Cleaning Operations or Solvent Cleaning Activities within the South Coast AQMD.

Key Changes in Subdivision (c) – Definitions

- Added 14 New Definitions
 - For clarification and for new terminology used in rule language
 - Automotive Part
 - Battery Terminal
 - Chlorination System
 - Electricity Distribution Utility
 - Electricity Generating Facility
 - Emission Control System
 - Energy Curable Ink
 - Ink Application Equipment
 - Maximum Incremental Reactivity (MIR)
 - Ozone Generator
 - Press
 - Public Water System
 - Product-Weighted Maximum Incremental Reactivity (PW-MIR)
 - Solvent Cleaner Supplier
 - Solvent Cleaning Activity
 - Solvent Cleaning Operation
 - South Coast AQMD Test Method
 - Throttle Body
 - Ultraviolet Light Treatment
 - Water Treatment Facility

Key Changes in Subdivision (c) – Definitions

- Revised five key definitions
 - Solvent Cleaner or Solvent Cleaning Materials
 - Solvent Cleaning
 - Electron Beam Ink, and Ultraviolet Ink
 - Combined into new Energy Curable Ink definition
- Removed five obsolete, outdated and unused definitions
 - Architectural Coating
 - Clean Air Solvent
 - Clean Air Solvent Certificate
 - Full Service Solvent Provider
 - Solvent Supplier
 - Wipe Cleaning

Subdivision (c) – Definitions

- Added definitions for clarity for alternative compliance options
- Based on stakeholder feedback

- (4) AUTOMOTIVE PART means any individual mechanical component that that is part of a vehicle that allows the vehicle to operate, including but not limited to, engine components, transmission components, suspension components, brake components, and intake system components.
- (5) BATTERY TERMINAL means the electrical contact or component of a battery that connects the battery to a charger, device, other battery, or external electrical circuit and transfers energy.
- (8) CHLORINATION SYSTEM means a chlorine feed system used for the oxidation of microbiological material, organic compounds or inorganic compounds during the water or wastewater treatment process. Chlorine can be in the form of gaseous chlorine, sodium hypochlorite, or calcium hypochlorite.

Subdivision (c) – Definitions

- Added definitions for clarity and compliance with alternative usage and MIR limits
- Definitions based on stakeholder feedback

(11) ELECTRICITY DISTRIBUTION UTILITY means one of several organizations that control energy transmission and distribution in California, including, but are not limited to, the Pacific Gas and Electric Company, the San Diego Gas and Electric Company, Southern California Edison, Los Angeles Department of Water and Power, the Imperial Irrigation District, and the Sacramento Municipal Utility District.

(12) ELECTRICITY GENERATING FACILITY means

(A) A facility that is owned or operated by an investor-owned electric utility or a public-owned electric utility and has one or more electric generating units; or

(B) A facility that has electric generating units for onsite use and or distribution in the state or local electrical grid system.

Electricity Generating Facility does not include facilities subject to Rule 1109.1 – Emissions of Oxides of Nitrogen from Petroleum Refineries and Related Operations.

Subdivision (c) – Definitions

- Added for clarity of applicability in Table 1 and alternative compliance options

- (14) EMISSION CONTROL SYSTEM means any combination of capture systems and control devices used to reduce VOC emissions.
- (15) ENERGY CURABLE INK means an ink that dries upon exposure to visible-light, ultra-violet light, or an electron beam.
- (26) INK APPLICATION EQUIPMENT means any tool, machine, system, or component of any tool, machine, or system used to apply ink to a substrate.
- (42) OZONE GENERATOR means a mechanical system that produces ozone used for water or wastewater treatment. Ozone is produced by applying an electric potential to oxygen that can be either in the form of dry air or pure oxygen.

Subdivision (c) – Definitions

- Added for clarity in alternative compliance options
- Public Water System definition updated based on stakeholder feedback

(47) PRESS means a mechanical device used to apply pressure to an inked surface resting on a substrate to transfer color, design, alphabetical text, or numerals to the substrate.

(49) PUBLIC WATER SYSTEM means a system that provides water for human consumption through pipes or other constructed conveyances that has fifteen or more connections or regularly serves at least twenty-five individuals daily at least sixty days out of the year.

Subdivision (c) – Definitions

- Added definition to reflect addition of alternative PW-MIR limit in rule

(49) PRODUCT-WEIGHTED MIR (PW-MIR) means the sum of all weighted-MIR for all ingredients in a Regulated 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 x Weight fraction ingredient,

and,

$PW-MIR = (Wtd-MIR)_1 + (Wtd-MIR)_2 + \dots + (WtdMIR)_n$

where,

MIR = ingredient MIR; and

1,2,3,....,n = each ingredient in the product up to the total n ingredients in the product.

Subdivision (c) – Definitions

- Definitions added to provide clarity between various solvent related processes

- (~~51~~60) SOLVENT CLEANER OR SOLVENT CLEANING MATERIAL ~~is~~ means a ~~VOC-containing~~ liquid substance used to perform ~~solvent cleaning~~ Solvent Cleaning.
- (61) SOLVENT CLEANER SUPPLIER means any person who sells and delivers or arranges to deliver Solvent Cleaning Materials to a facility subject to this rule.
- (~~52~~62) SOLVENT CLEANING ~~is~~ means the use of a Solvent Cleaner or Solvent Cleaning Material for the removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants ~~which~~ that include, but are not limited to, dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas. Each distinct method of Solvent Cleaning ~~cleaning in a cleaning process, which consists of a series of cleaning methods,~~ shall constitute a ~~separate solvent cleaning~~ Solvent Cleaning operation Activity.
- (63) SOLVENT CLEANING ACTIVITY means a distinct method of cleaning, ~~or a series of distinct cleaning methods,~~ in a Solvent Cleaning process or single event.
- (64) SOLVENT CLEANING OPERATION means a Solvent Cleaning Activity or Solvent Cleaning Activities conducted as part of a business or a public service.

Subdivision (c) – Definitions

- South Coast AQMD Test Method mentioned multiple times in rule, so added definition to streamline rule
- Throttle body definition added to reflect specific aerosol exemption revision

(66) 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).

(72) THROTTLE BODY means a component of a vehicle air intake system, and is located between the air intake filter and intake manifold of the vehicle air intake system, and controls the amount of air that flows into the vehicle engine.

Subdivision (c) – Definitions

- Added definitions for clarity for alternative compliance options
- Based on stakeholder feedback

(73) ULTRAVIOLET LIGHT TREATMENT means the process of using ultraviolet light to inactivate microorganisms (i.e., disinfection) or using ultraviolet light either with or without the addition of peroxide to oxidize contaminants (i.e., oxidation). Ultraviolet light treatment is used for both potable water and wastewater, including indirect and direct potable water reuse projects.

(75) WATER TREATMENT FACILITY means a public entity that is responsible for water delivery operations, sewage pumping plants, sewage treatment, or water reclamation.

Subdivision (d) – Requirements

- ~~(H) — Cleaning of adhesive application equipment used for thin metal laminating operations provided the clean-up solvent used contains no more than 950 grams of VOC per liter.~~
- ~~(I) — Cleaning of electronic or electrical cables provided the clean-up solvent used contains no more than 400 grams of VOC per liter.~~
- ~~(J) — Touch up cleaning performed on printed circuit boards where surface mounted devices have already been attached provided that the solvent used contains no more than 800 grams of VOC per liter.~~

- Solvent cleaning activity subcategories previously conditionally exempt from Table 1 requirements moved from exemptions subdivision to Table 1
 - Cleaning of printed circuit boards during the manufacturing process
 - Repair and maintenance cleaning of electronic or electrical cables
 - Cleaning of adhesive application equipment for thin or sheet metal laminating

Subdivision (d) – Requirements

- Reformatted table and added new Solvent Cleaning Activity categories with corresponding VOC limits

**Table 1 – Table of Standards
VOC Content Limits**

<u>SOLVENT CLEANING ACTIVITY</u>	<u>VOC Limits</u>	
	<u>g/L</u>	<u>lbs/gal</u>
<u>(A) Product Cleaning During Manufacturing Process, or Surface Preparation for Coating, Adhesive, or Ink Application</u>		
<u>(i) General</u>	25	0.21
<u>(ii) Electrical Apparatus Components & Electronic Components</u>	100	0.83
<u>(A) Printed Circuit Boards</u>	800	6.7
<u>(iii) Medical Devices & Pharmaceuticals</u>	800	6.7
<u>(B) Repair and Maintenance Cleaning</u>		
<u>(i) General</u>	25	0.21
<u>(ii) Electrical Apparatus Components & Electronic Components</u>	100	0.83
<u>(A) Electronic or Electrical Cables</u>	400	3.4
<u>(iii) Medical Devices & Pharmaceuticals</u>		
<u>(A) Tools, Equipment, & Machinery</u>	800	6.7
<u>(B) General Work Surfaces</u>	600	5.0
<u>(C) Cleaning of Coatings or Adhesives Application Equipment</u>		
<u>(i) General</u>	25	0.21
<u>(ii) Thin or Sheet Metal Laminating Equipment</u>	950	8.0
<u>(D) Cleaning of Ink Application Equipment</u>		
<u>(i) General</u>	25	0.21
<u>(ii) Flexographic Printing</u>	25	0.21
<u>(iii) Gravure Printing</u>		
<u>(A) Publication</u>	100	0.83
<u>(B) Packaging</u>	25	0.21
<u>(iv) Lithographic (Offset) or Letter Press Printing</u>		
<u>(A) Roller Wash, Blanket Wash, & On-Press Components</u>	100	0.83
<u>(B) Removable Press Components</u>	25	0.21
<u>(v) Screen Printing</u>	100	0.83
<u>(vi) Energy Curable Ink Application Equipment (except screen printing)</u>	100	0.83
<u>(vii) Specialty Flexographic Printing</u>	100	0.83
<u>(E) Cleaning of Polyester Resin Application Equipment</u>	25	0.21

Subdivision (d) – Requirements

- Clarified wipe cleaning method in reference and removed definition
- Removed subparagraph (d)(2)(D), referenced manual no longer exists

(2) Cleaning Devices and Methods Requirements

A person shall not perform ~~solvent-cleaning~~Solvent Cleaning Activities listed in paragraph (d)(1) unless one of the following cleaning devices or methods is used:

- (A) Wipe cleaning, which is a Solvent Cleaning Activity conducted by physically rubbing it with a material such as a rag, paper, sponge or a cotton swab moistened with a solvent;
- (B) Closed containers or hand-held spray bottles from which ~~solvents~~Solvent Cleaners are applied without a propellant-induced force;
- (C) Cleaning equipment ~~which~~that has a ~~solvent~~Solvent Cleaner container that can be closed, and is closed during ~~cleaning operations~~Solvent Cleaning Activities, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself;
- ~~(D) — Cleaning device which is listed in the Office of Operations' manual "Alternative Devices for Rule 1171 Compliance" dated . The Executive Officer shall periodically update the manual to identify any additional cleaning devices determined by the Executive Officer to result in equivalent or lower emissions; the manual to identify any additional cleaning devices determined by the Executive Officer to result in equivalent or lower emissions;~~



Subdivision (d) – Requirements

- Added recordkeeping requirements for repairs of liquid leaks, visible tears, or cracks detected in auxiliary equipment associated with remote reservoir cleaners

(3) Remote Reservoir Cleaners

Any person owning or operating a ~~remote-reservoir-cleaner~~Remote Reservoir Cleaner shall comply with all of the following requirements in addition to the applicable VOC limits specified in paragraph ~~(e)~~(d)(1):

- (A) Prevent ~~solvent~~Solvent Cleaner vapors from escaping from the ~~solvent~~Solvent Cleaner container by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired;
- (B) Direct ~~solvent~~Solvent Cleaner flow in a manner that will prevent liquid ~~solvent~~Solvent Cleaning Material from splashing outside of the ~~remote-reservoir-cleaner~~Remote Reservoir Cleaner;
- (C) ~~Do-not~~Not clean porous or absorbent materials, such as cloth, leather, wood, or rope; and
- (D) Use only ~~solvent~~ containers free of all liquid leaks. Auxiliary equipment, such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks. -Any liquid leak, visible tear, or crack detected shall be repaired within one (1) calendar day, or the leaking section of the remote reservoir cold cleaner shall be drained of all ~~solvent~~Solvent Cleaning Materials and shut down until it is replaced or repaired. Record of any repair of liquid leaks, visible tears, or cracks shall be maintained and kept onsite for five years following the day of repair.



Subdivision (d) – Requirements

(5) Labeling

Any person who sells or offers for sale Solvent Cleaning Materials for use in the South Coast AQMD shall comply with the provisions of Rule 443.1 – Labeling of Materials Containing Organic Solvents.

- Labeling requirements moved from General Prohibitions subdivision
- No changes made to labeling requirements at this time
- Staff considering adding PW-MIR labeling requirements to confirm compliance with alternative MIR limits

Subdivision (e) – Alternative Compliance Options

- Moved from the Requirements subdivision to its own separate subdivision

(e) ~~(5)~~ Alternative Compliance Options ~~Control Equipment~~

(1) In lieu of complying with the requirements in paragraphs ~~(e)(d)(1)~~ or ~~and~~ ~~(e)(d)(2)~~, a person may comply by using a VOC ~~emission collection and control system~~ Emission Control System in association with the ~~solvent cleaning operation~~ Solvent Cleaning Activities provided the Emission Control System:

- (A) ~~the emission control system shall collect~~ Collects at least 90 percent, by weight, of the emissions generated by the ~~solvent cleaning operation~~ Solvent Cleaning Activities; and
- (i) ~~have~~ Has a destruction efficiency of at least 95 percent, by weight, or
- (ii) ~~have~~ Has an output of less than 50 parts per million (~~PPM~~) calculated as carbon with no dilution; or
- (B) ~~the emission control system meets~~ Meets the requirements of the applicable source specific rule of ~~the District's~~ South Coast AQMD Regulation XI; or
- (C) ~~The collection system for~~ For cleaning in ~~graphic arts~~ Graphic Arts and ~~screen printing~~ Screen Printing and cleaning of application equipment used for ~~graphic arts~~ Graphic Arts materials and ~~screen printing~~ Screen Printing materials:
- (i) ~~shall~~ Collect at least 70 percent, by weight, of the emissions generated; and
- (ii) ~~This control system shall reduce emissions from the emission collection system by~~ Has a destruction efficiency of at least 95 percent, by weight.

Subdivision (e) – Alternative Compliance Options

- (D) For internal cleaning of enclosed mobile containers, including but not limited to rail tank cars and tanker truck containers, used to transport materials:
- (i) Shall be air-tight and leak free during the Solvent Cleaning Activities; and
 - (ii) For all fugitive components, vapor leaks shall not exceed 50 parts per million measured on a South Coast AQMD organic vapor analyzer calculated as carbon, with no dilution.

- Staff added a new alternative compliance option for the cleaning of internal surfaces of enclosed mobile containers used to transport materials
- Facilities have the option of complying with the measuring requirement added in lieu of Table 1 – Table of Standards VOC Content limits

Subdivision (e) – Alternative Compliance Options

- Operators of electricity generating and distributing equipment, and operators of water treatment and distribution equipment rely on exempted use of alcohol aerosol products to clean specific equipment
- To address stakeholder concerns regarding availability of these solvent cleaners, staff is proposing to allow for limited use of liquid alcohols for cleaning of specific equipment

(2) Alternative Limits for Electricity and Water Equipment

Facilities conducting Solvent Cleaning Activities for the following equipment listed in Table 2 that are operated at Electricity Generating Facilities, Electricity Distributing Utilities, Water Treatment Facilities or Public Water Systems may use Solvent Cleaning Materials that exceed the VOC limits in paragraph (d)(1) and shall not be subject to the provisions of paragraph (f)(1) provided:

- (A) The Facility uses no more than the annual volumes listed in Table 2;
- (B) The Solvent Cleaning Materials have a PW-MIR no more than those listed in Table 2; and
- (C) The Facility maintains monthly purchase and usage records on-site for a minimum of five years.

Subdivision (e) – Alternative Compliance Options

Table 2 – Alternative Usage and MIR Limits

<u>Solvent Cleaning Activity</u>	<u>Usage Limits (gallons per year)</u>	<u>PW-MIR</u>
<u>(A) Electricity Generating or Distribution Equipment</u>	<u>70</u>	<u>0.61</u>
<u>(B) Water Distribution Equipment and Water Treatment Equipment</u>		
<u>(i) Chlorination Systems</u>	<u>5</u>	<u>1.7</u>
<u>(ii) Ozone Generators</u>	<u>30</u>	<u>0.61</u>
<u>(iii) Ultraviolet Light Treatment Systems</u>	<u>16</u>	<u>1.7</u>

- Volume-based limits in Table 2 based on stakeholder feedback reflecting current operation and
- Address concern regarding future availability of aerosol denatured alcohol
- PW-MIR limits based on established isopropyl alcohol and denatured alcohol MIR values
- Denatured alcohol based on upper PW-MIR value since composition can vary based on manufacturer

Subdivision (e) – Alternative Compliance Options

- Auto repair facilities rely on exempted use of aerosol solvent cleaners to clean specific engine components
- Battery manufacturers rely on exempted use of aerosol solvent cleaners to clean battery terminals
- Staff proposing to allow for limited use of aerosol solvent cleaners for cleaning of specific engine components and for cleaning of battery terminals with monthly usage limits to:
 - Provides flexibility and reflects current aerosol products are used within industry

(3) Alternative Limits for Aerosol Cleaning

Facilities conducting Solvent Cleaning Activities listed in Table 3 may use Aerosol Solvent Cleaners that exceed the VOC limits in paragraph (d)(1) and shall not be subject to the provisions of paragraph (f)(1) provided:

- (A) The Facility complies with the applicable usage limit(s) listed in Table 3;
- (B) The Facility maintains monthly purchase and usage records on-site for a minimum of five years; and
- (C) The use of such products complies with California Air Resources Board (CARB) regulations.

Table 3 – Aerosol Solvent Cleaner Usage Limits

<u>Solvent Cleaning Activity</u>	<u>Usage Limits</u>
<u>(A) Cleaning of Automotive Parts</u>	
<u>(i) Throttle Body and Intake Systems</u>	<u>4,800 ounces per month</u>
<u>(ii) All Other Automotive Part Cleaning</u>	<u>32 ounces per month</u>
<u>(B) Battery Terminal Cleaning at Battery Manufacturing Facilities</u>	<u>2,400 ounces per month</u>
<u>(C) All Others Solvent Cleaning Activities</u>	<u>160 ounces per month</u>

Subdivision (e) – Alternative Compliance Options

- Table 3 limits based on stakeholder feedback reflecting current operation
- Current rule language exempts general usage of aerosol products from VOC limits in Table 1 if 160 fluid ounces or less are used per day
- Staff proposing to limit to 160 fluid ounces per month to prevent circumvention of Table 1 limit
- Staff proposing limits in ounces rather than fluid ounces to align with CARB requirements for aerosol

Subdivision (e) – Alternative Compliance Options

(4) Alternative MIR Limit

In lieu of complying with the requirements in paragraph (d)(1), a Person may elect to supply for use within South Coast AQMD or use Solvent Cleaning Materials that comply with a PW-MIR limit of 0.38 g O₃/g VOC for any Solvent Cleaning Activity.

- Staff proposing a general alternative PW-MIR limit for all solvent cleaning activities
- Alternative limit based on MIR value of acetone and feedback from stakeholder
- In lieu of complying with applicable VOC limit(s) in Table 1 of Rule

Subdivision (f) – General Prohibitions

- Added language prohibiting the use of solvent cleaning materials in South Coast AQMD that contain pCBtF, t-BAc, and VMS

~~(d)~~(f) General Prohibitions

- (1) A person shall not atomize any ~~solvent~~Solvent Cleaner unless it is vented to ~~an air pollution control equipment~~Emission Control System, ~~which~~that meets the requirements of paragraph ~~(e)(5)~~(e)(1).
- (2) A person shall not specify or require any person to use a solvent Solvent Cleaner or equipment subject to the provisions of this rule that does not meet the requirements of this rule.
- (3) Carcinogenic Materials and Exempt Compounds
A person shall not perform ~~solvent cleaning activities~~Solvent Cleaning Activities ~~or operations~~ subject to the provisions of this rule with any ~~material~~Solvent Cleaning Material ~~which~~that contains any of the following chemicals in concentrations greater than the limits indicated:
 - 0.01 percent by weight of Group II ~~exempt compounds listed in Rule 102~~ Exempt Compound except cyclic, branched, or linear, completely methylated siloxanes (VMS); or
 - 0.01 percent by weight of para-Chlorobenzotrifluoride (pCBtF), CAS 98-56-6, tert-Butyl Acetate (t-BAc), CAS 540-88-5, or VMS for Solvent Cleaning Materials manufactured after January 1, 2026.

Subdivision (f) – General Prohibitions

- Added language prohibiting use of solvent cleaning materials in which documentation confirming the VOC content and additional info cannot be provided
- Added language prohibiting the possession of non-compliant solvent cleaning materials

- (5) No ~~full-service solvent~~Solvent Cleaner provider~~Supplier~~ shall aid, abet or assist a facility or solvent-cleaning-operation any person to use a supplied ~~solvent~~Solvent Cleaner in a non-compliant manner that does not meet the requirements of this rule.
- (6) No Solvent Cleaner shall be used when documentation cannot be provided pursuant to paragraph (g)(2) for that Solvent Cleaner.
- (7) Solvent Cleaning Materials that do not meet the requirements of this rule and are used, intended for use, or labeled for use, for Solvent Cleaning Activities or Solvent Flushing shall not be kept on-site.

Subdivision (f) – General Prohibitions

(4) Sell Through Provision for pCBtF, t-BAc and VMS

Any Solvent Cleaning Material that is manufactured prior to January 1, 2026, that contains more than 0.01 percent of pCBtF, t-BAc, or VMS, may be sold, supplied, or offered for sale until January 1, 2027, and used until January 1, 2028.

- Added language clarifying periods during which solvent cleaning materials that contain pCBtF, t-BAc and VMS can continue to be sold and used after the prohibition effective date of January 1, 2026
- Mitigates potential issue of stranded assets for materials already in supply chain or currently in use at time of prohibition becomes effective

Subdivision (g) – Recordkeeping Requirements

- Moved recordkeeping requirements from general requirements to its own separate subdivision

(g) Recordkeeping Requirements

- (1) Any person who performs Solvent Cleaning Activities shall maintain records pursuant to Rule 109 – Recordkeeping for Volatile Organic Compound Emissions for all applications subject to this rule, including those exempted under paragraphs (j)(3) through (j)(6), except facilities required to keep records of Solvent Cleaning Materials used and Solvent Flushing pursuant to an applicable Regulation XI source specific rule.
- (2) Documentation shall be maintained onsite for all Solvent Cleaning Materials used for five years, and made available to the Executive Officer upon request, that includes the following for each solvent cleaning activity performed:
 - (A) Product name of each Solvent Cleaner used;
 - (B) Name and address of the supplier for each Solvent Cleaner used;
 - (C) Dates and quantities in which each Solvent Cleaner was used during the time period specified by the Executive Officer; and
 - (D) VOC content of each Solvent Cleaner as used.
- (3) Any Solvent Cleaner Supplier supplying Solvent Cleaning Materials for use in the South Coast AQMD shall maintain the following records for five years and make the data available upon request by the Executive Officer:
 - (A) Product name of each supplied Solvent Cleaner;
 - (B) Name and address of the facility that the Solvent Cleaner was supplied to;
 - (C) Dates and quantities in which the Solvent Cleaner was supplied during the time period specified by the Executive Officer; and
 - (D) VOC content of the Solvent Cleaner as supplied.

Subdivision (g) – Recordkeeping Requirements

- Restructured for streamlining and readability purposes, and revised time required to maintain records

(4) Dilution Instructions

If a Solvent Cleaner is required to be diluted prior to being used in a Solvent Cleaning Activity to meet the applicable VOC limits:

- (A) Any person who uses Solvent Cleaning Materials requiring such dilution shall maintain at all times, and make available to the Executive Officer upon request, the correct written dilution instructions for each of these Solvent Cleaner; and
- (B) The Solvent Cleaner Supplier providing Solvent Cleaning Material for use in the South Coast AQMD shall supply to the operator, upon the operator's request, the correct written dilution instructions for each supplied Solvent Cleaner.

Subdivision (h) – Test Methods

- Restructured and streamlined for consistency with other rules

(e)(h) Test Methods

~~For the purpose of this rule, the following test methods shall be used.—Other test methods determined to be equivalent after review by the staffs of the District, the Air Resources Board, and the United States Environmental Protection Agency, and approved in writing by the District Executive Officer may also be used.~~

(1) Determination of VOC Content

The VOC content of materials subject to the provisions of this rule shall be determined by the following methods:

- (A) United States Environmental Protection Agency (U.S. EPA) Reference [Test Method 24 – Determination of Volatile Matter Content, Water Content, Volume Solids and Weight Solids of Surface Coatings](#), (Code of Federal Regulations, Title 40, Part 60, Appendix A [with the Exempt Compounds' content determined by South Coast AQMD Test Method 303 – Determination of Exempt Compounds](#)); ~~—The exempt compounds' content shall be determined by the South Coast Air Quality Management District's (SCAQMD) Method 303 (Determination of Exempt Compounds) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual; or,~~
- (B) ~~SCAQMD~~ [South Coast AQMD Test Method 304 – \[Determination of Volatile Organic Compounds \(VOC\) in Various Materials\]](#) ~~contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual; or~~
- (C) [South Coast AQMD Test Method 313 – Determination of Volatile Organic Compounds \(VOC\) by Gas Chromatography-Mass Spectrometry/Mass Spectrometry/Flame Ionization Detection \(GC/MS/FID\).](#)

Subdivision (h) – Test Methods

~~(C)~~(2) Exempt Perfluorocarbon Compounds

The following classes of compounds shall be analyzed as Exempt Compounds for compliance with subdivision (d), only at such time as manufacturers specify which individual compounds are used in the solvent formulation and identify the test methods, which have been approved by the U.S. EPA, CARB and the South Coast AQMD prior to such analysis, that can be used to quantify the amounts of each exempt compound:

(A) ~~eyelie~~Cyclic, branched, or linear, completely fluorinated alkanes;

(B) ~~eyelie~~Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(C) ~~eyelie~~Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) ~~sulfur~~Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

~~will be analyzed as exempt compounds for compliance with subdivision (c), only when manufacturers specify which individual compounds are used in the solvent formulation and identify the United States Environmental Protection Agency, California Air Resources Board, and the District approved test methods used to quantify the amount of each exempt compound.~~

Subdivision (h) – Test Methods

~~(2) — Determination of Presence of VOC in Cleaning Materials~~

~~The presence of VOC in the headspace over the cleaning material shall be determined by SCAQMD Test Method 313 [Determination of Presence of Volatile Organic Compounds (VOC) in a Headspace] contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.~~

~~The presence of VOC in liquid cleaning materials shall be determined by SCAQMD Method 308 (Quantitation of Compounds by Gas Chromatography) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.~~

- Moved Test Method 313
 - Now in subparagraph (h)(1)(C) for Determination of VOC Content
 - Corrected test method name
- Removed Test Method 308
 - Outdated test method no longer used by the South Coast AQMD laboratory

Subdivision (j) – Exemptions

~~(g)~~(j) Exemptions

(1) ~~___~~ The ~~provisions of this rule~~ recordkeeping provisions in subdivision (g), ~~except (c)(1), Solvent Requirements~~ shall not apply to ~~cleaning operations~~ Solvent Cleaning Activities using ~~a solvent~~ Solvent Cleaning Materials containing no more than 25 grams of VOC per liter of material, provided that, if the Executive Officer determines that a person has violated any of the VOC limits in provision of paragraph ~~(e)(1)(d)(1)~~ for any Solvent Cleaning Activities occurring, ~~Solvent Requirements~~, then for a period of ~~three~~ five years following the date of such violation, the recordkeeping requirements in paragraph (e)(6) subdivision (g) ~~Recordkeeping Requirements~~, shall apply to the facility at which the violation occurred.

- Staff rephrased to clarify conditional exemption and subsequent applicable recordkeeping requirements if exemption conditions are not met

Subdivision (j) – Exemptions

- ~~(H) — Cleaning of adhesive application equipment used for thin metal laminating operations provided the clean-up solvent used contains no more than 950 grams of VOC per liter.~~
- ~~(I) — Cleaning of electronic or electrical cables provided the clean-up solvent used contains no more than 400 grams of VOC per liter.~~
- ~~(J) — Touch up cleaning performed on printed circuit boards where surface mounted devices have already been attached provided that the solvent used contains no more than 800 grams of VOC per liter.~~
- ~~(4) — Cleaning with aerosol products shall not be subject to the provisions of paragraph (c)(1) and paragraph (d)(1) if 160 fluid ounces or less of non-compliant aerosol products are used per day, per facility. The use of such product shall comply with CARB regulations.~~

- Subparagraphs (j)(3)(H), (j)(3)(I), and (j)(3)(J) moved to Table 1
- Paragraph (j)(4) moved from exemptions to Subdivision (e) – Alternative Compliance Options

~~(C) The cleaning Cleaning of solvent-based fluoropolymer coating application equipment Application Equipment, used to apply solvent-based fluoropolymer coatings provided the clean up solvent used for such cleaning contains no more than 900 grams of VOC per liter provided less than one gallon per day of Solvent Cleaning Materials is used.~~

- Subparagraphs (j)(5)(C) revised to volume-based limit to restrict usage increase

Subdivision (j) – Exemptions

- (6) The ~~provisions of~~ VOC limit in subparagraph ~~(e)~~(d)(1)(D) shall not apply to persons or facilities using less than 1.5 gallons per day of ~~solvents~~Solvent Cleaning Materials to clean sterilization indicating ink ~~application equipment~~Application Equipment.
- ~~(7) — Until January 1, 2010, the provisions of (e)(1)(D)(v) shall not apply to on-press cleaning of screens provided the clean up solvent used for such cleaning activity contains no more than 300 grams of VOC per liter.~~
- ~~(8) — Until January 1, 2010, the provisions of (e)(1)(D)(vi) shall not apply to the cleaning of ultraviolet or electron beam lamps and reflectors used for the curing of ultraviolet or electron beam (UV/EB) ink or coatings, and cleaning of metering rollers, dampening rollers and printing plates in UV/EB ink application equipment, provided the clean up solvent used for such cleaning contains no more than 800 grams of VOC per liter.~~

- Paragraphs (j)(7) and (j)(8) are obsolete and therefore deleted

- ~~(10) — The provisions of this rule shall not apply to cleaning operations in printing pre-press or graphic arts, pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning.~~

- Paragraph (j)(10) moved to subparagraph (j)(2)(H)

Emissions Impact

Emission Impacts

- Proposed prohibition of pCBtF, t-BAc, and VMS does not impact existing VOC emissions for solvent cleaning activities
- Existing VOC limits maintained at current levels
- Alternatives that do not contain pCBtF, t-BAc, or VMS are available
- Revision to aerosol exemption provides flexibility
 - Proposed usage thresholds better reflect industry needs
 - Allows for use of liquid alcohols as substitute for aerosols
- No associated emissions increase or cost with the proposed amendments



Socioeconomic Impact Assessment and California Environmental Quality Act (CEQA)

Socioeconomic Impact Assessment

- Socioeconomic analysis for PAR 1171 will consider:
 1. Types of affected industries, including small businesses
 2. Range of probable costs or savings
 3. Impacts on employment and the regional economy
- Will be made available for public review and comment at least 30 days prior to the South Coast AQMD Governing Board Public Hearing on June 6, 2025 (subject to change)

California Environmental Quality Act (CEQA)

- PAR 1171 is a project subject to CEQA
- South Coast AQMD, as lead agency, is reviewing PAR 1171 to determine if it will result in any potential adverse environmental impacts
- Appropriate CEQA documentation will be prepared based on the analysis

Next Steps

Next Steps

End of Comment Period on April 11, 2025

Stationary Source Committee on April 18, 2025

Set Hearing on May 2, 2025

Public Hearing on June 6, 2025

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>

South Coast AQMD

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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

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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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<input type="checkbox"/> Rule 1173	Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants



South Coast
AQMD

South Coast
Air Quality
Management District

Rule Staff Contacts

Chris Bradley

Air Quality Specialist
cbradley@aqmd.gov
909.396.2185

Sarady Ka

Program Supervisor
ska@aqmd.gov
909.396.2331

Heather Farr

Planning and Rules Manager
hfarr@aqmd.gov
909.396.3672

Michael Morris

Planning and Rules Manager
mmorris@aqmd.gov
909.396.3282

Michael Krause

Assistant DEO
mkrause@aqmd.gov
909.396.2706



South Coast
Air Quality
Management District

Socioeconomic Analysis and CEQA Staff Contacts

Socioeconomic Analysis

Chris Yu

Assistant Air Quality Specialist

cyu@aqmd.gov

909.396.3025

Tony Tian, Ph.D.

Program Supervisor

ttian@aqmd.gov

909.396.2323

CEQA

Sina Taghvaei, Ph.D.

Air Quality Specialist

staghvaei@aqmd.gov

909.396.2192

Kevin Ni

Program Supervisor

kni@aqmd.gov

909.396.2462

Barbara Radlein

Planning and Rules Manager

bradlein@aqmd.gov

909.396.2716