

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## Final Environmental Assessment for Proposed Amended Rule 1168 – Adhesive and Sealant Applications

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## PREFACE

This document constitutes the Final Environmental Assessment (EA) for Proposed Amended Rule (PAR) 1168 – Adhesive and Sealant Applications. A Draft EA was released for a 30-day public review and comment period from August 16, 2017 to September 15, 2017. Analysis of PAR 1168 in the Draft EA did not result in the identification of any environmental topic areas that would be significantly adversely affected. Two comment letters were received from the public regarding the analysis in the Draft EA. The comment letters received relative to the Draft EA and responses to individual comments are included in Appendix B of this document.

In addition, subsequent to release of the Draft EA, modifications were made to PAR 1168 and some of the revisions were made in response to verbal and written comments received during the rule development process. To facilitate identification, modifications to the document are included as underlined text and text removed from the document is indicated by ~~strikethrough~~. To avoid confusion, minor formatting changes are not shown in underline or strikethrough mode.

Staff has reviewed the modifications to PAR 1168 and concluded that none of the revisions constitute: 1) significant new information; 2) a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the draft document. In addition, revisions to the proposed project in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Section 15073.5 and 15088.5. Therefore, this document now constitutes the Final EA for PAR 1168.

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## **CHAPTER 1**

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### **PROJECT DESCRIPTION**

**Introduction**

**California Environmental Quality Act**

**Project Location**

**Project Background**

**Project Description**

## INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD or District) in 1977<sup>1</sup> as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the District<sup>2</sup>. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP<sup>3</sup>. The AQMP is a regional blueprint for how the SCAQMD will achieve air quality standards and healthful air and the 2016 AQMP<sup>4</sup> contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxics. In particular, the 2016 AQMP includes control measure CTS-01: Further Emission Reductions from Coatings, Solvents, Adhesives, and Sealants, which identifies Rule 1168 – Adhesive and Sealant Applications, a rule that regulates volatile organic compounds (VOC), as having the potential to achieve additional VOC emission reductions. In addition, the 2016 AQMP also includes control measure MCS-01: Application of All Feasible Measures Assessment, which seeks to achieve emission reductions from all pollutants, including VOCs. Proposed amended Rule (PAR) 1168 has been developed to partially implement CTS-01 and MCS-01.

Rule 1168 applies to anyone who uses, sells, stores, supplies, offers for sale or manufactures for sale any adhesives and sealants. Adhesives and sealants are primarily used for architectural applications and the majority of emissions come from a broad range of small volume users in manufacturing, commercial, and consumer applications. Approximately 3,000 regulated products were reported in a survey conducted in 2013. Staff believes this may be an underrepresentation of the total number of affected regulated products based on stakeholder input and products found by SCAQMD staff the field.

The following industry sectors, as classified by the North American Industry Classification System (NAICS) code, make extensive use of products subject to Rule 1168:

- Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing (NAICS 333415)
- All Other Rubber Product Manufacturing (NAICS 326299)
- Commercial and Institutional Building Construction (NAICS 236220)
- Custom Architectural Woodwork and Millwork Manufacturing (NAICS 337212)
- Drywall and Insulation Contractors (NAICS 238310)
- Flooring Contractors (NAICS 238330)
- Footwear Manufacturing (NAICS 316210)
- Glass and Glazing Contractors (NAICS 238150)
- Hardwood Veneer and Plywood Manufacturing (NAICS 321211)
- Household Furniture (except Wood and Metal) Manufacturing (NAICS 337125)
- Industrial Building Construction (NAICS 236210)
- Manufactured Home (Mobile Home) Manufacturing (NAICS 321991)

<sup>1</sup> The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch. 324 (codified at Health and Safety Code Section 40400-40540).

<sup>2</sup> Health and Safety Code Section 40460(a).

<sup>3</sup> Health and Safety Code Section 40440(a).

<sup>4</sup> SCAQMD, 2016 Air Quality Management Plan. <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf>

- Motor Vehicle Seating and Interior Trim Manufacturing (NAICS 336360)
- New Multifamily Housing Construction (except For-Sale Builders) (NAICS 236116)
- New Single-Family Housing Construction (except For-Sale Builders) (NAICS 236115)
- Office Furniture (except Wood) Manufacturing (NAICS 337214)
- Oil and Gas Pipeline and Related Structures Construction (NAICS 237120)
- Other Millwork (including Flooring) (NAICS 321918)
- Plumbing, Heating, and Air-Conditioning Contractors (NAICS 238220)
- Polystyrene Foam Product Manufacturing (NAICS 326140)
- Residential Remodelers (NAICS 236118)
- Roofing Contractors (NAICS 238160)
- Rubber Product Manufacturing for Mechanical Use (NAICS 326291)
- Showcase, Partition, Shelving, and Locker Manufacturing (NAICS 337215)
- Siding Contractors (NAICS 238170)
- Surgical Appliance and Supplies Manufacturing (NAICS 339113)
- Tile and Terrazzo Contractors (NAICS 238340)
- Tire Retreading (NAICS 326212)
- Urethane and Other Foam Product (except Polystyrene) Manufacturing (NAICS 326150)
- Water and Sewer Line and Related Structures Construction (NAICS 237110)
- Wood Container and Pallet Manufacturing (NAICS 321920)
- Wood Kitchen Cabinet and Countertop Manufacturing (NAICS 337110)
- Wood Window and Door Manufacturing (NAICS 321911)

The industries that supply regulated products to facilities are covered by Asphalt Shingle and Coating Materials Manufacturing (NAICS 324122 and 325520) and Adhesive Manufacturing (NAICS 325520).

PAR 1168 would further reduce emissions of volatile organic compounds (VOCs), toxic air contaminants, and stratospheric ozone-depleting compounds from adhesives, adhesive primers, sealants, and sealant primers. PAR 1168 will clarify applicability; revise, delete, and add definitions; lower VOC limits for certain categories and allow for a three-year sell-through and use-through; add new product categories with corresponding VOC content limits; require products marketed for use under varying categories to be subject to the lowest VOC limit; prohibit the storage of non-compliant products, unless for shipment outside of the SCAQMD; add test methods for analyzing VOC content; add labeling requirements; include reporting requirements for manufacturers, private labelers, Big Box retailers, distribution centers, and facilities that use a 55 gallon per year exemption; prohibit the use of Rule 102 Group II exempt solvents, except volatile methyl siloxanes; include a technology assessment for certain product categories; remove, ~~modify~~ restrict, or add exemptions; include streamlined recordkeeping options for products with a VOC content of less than 20 grams per liter; and allow products with a viscosity of 200 centipoise or greater to be exempted from transfer efficiency requirements.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The California Environmental Quality Act (CEQA), California Public Resources Code Section 21000 *et seq.*, requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the “public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment”

(Public Resources Code Section 21067). Since PAR 1168 is a SCAQMD-proposed amended rule, the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency (CEQA Guidelines<sup>5</sup> Section 15051(b)).

CEQA requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the lead agency, responsible agencies, decision makers, and the general public of potential adverse environmental impacts that could result from implementing PAR 1168 (the proposed project) and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the Secretary of Resources Agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment.

PAR 1168 has been crafted to further reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds from adhesives, adhesive primers, sealants, and sealant primers. Because PAR 1168 requires discretionary approval by a public agency, it is a “project” as defined by CEQA<sup>6</sup>. The proposed project will reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds, and will provide an overall environmental benefit to air quality. However, SCAQMD's review of the proposed project also shows that implementation of PAR 1168 may ~~also create secondary adverse effects on the environment either directly or indirectly because~~ to the following areas: 1) the air quality and GHG impacts ~~were determined to be less than the significance thresholds as analyzed in Section III – Air Quality and Greenhouse Gases~~; 2) the hazards and hazardous materials impacts ~~were determined to be less than significant as analyzed in Section VIII – Hazards and Hazardous Materials~~; 3) the increased water usage and wastewater ~~was determined to be less than significant as analyzed in Section IX – Hydrology and Water Quality~~; 4) public services such as fire protection and police protection ~~were determined to be less than the significance thresholds as analyzed in Section XIV – Public Services~~. SCAQMD's review of these secondary adverse effects shows that PAR 1168 would not have a significant adverse effect on the environment. Thus, the type of CEQA document appropriate for the proposed project is an Environmental Assessment (EA). The EA is a substitute CEQA document, prepared in lieu of a Negative Declaration (CEQA Guidelines Section 15252), pursuant to the SCAQMD's Certified Regulatory Program (CEQA Guidelines Section 15251(l); SCAQMD Rule 110). The EA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and, 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, prepared a Draft EA pursuant to its Certified Regulatory Program. The Draft EA includes a project description in Chapter 1 and an Environmental Checklist in Chapter 2. The Environmental Checklist provides a standard tool to identify and evaluate a project's adverse environmental impacts and the analysis concluded that

<sup>5</sup> The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*

<sup>6</sup> CEQA Guidelines Section 15378

no significant adverse impacts would be expected to occur if PAR 1168 is implemented. Because PAR 1168 will have no statewide, regional or areawide significance, no CEQA scoping meeting is required to be held for the proposed project pursuant to Public Resources Code Section 21083.9(a)(2). Further, pursuant to CEQA Guidelines Section 15252, since no significant adverse impacts were identified, no alternatives or mitigation measures are required.

The Draft EA ~~was being~~ released for a 30-day public review and comment period from August 16, 2017 to September 15, 2017 and two comment letters were received. All comments received during the public comment period on the analysis presented in the Draft EA ~~will have been~~ responded to and are included in an Appendix B to this Final EA.

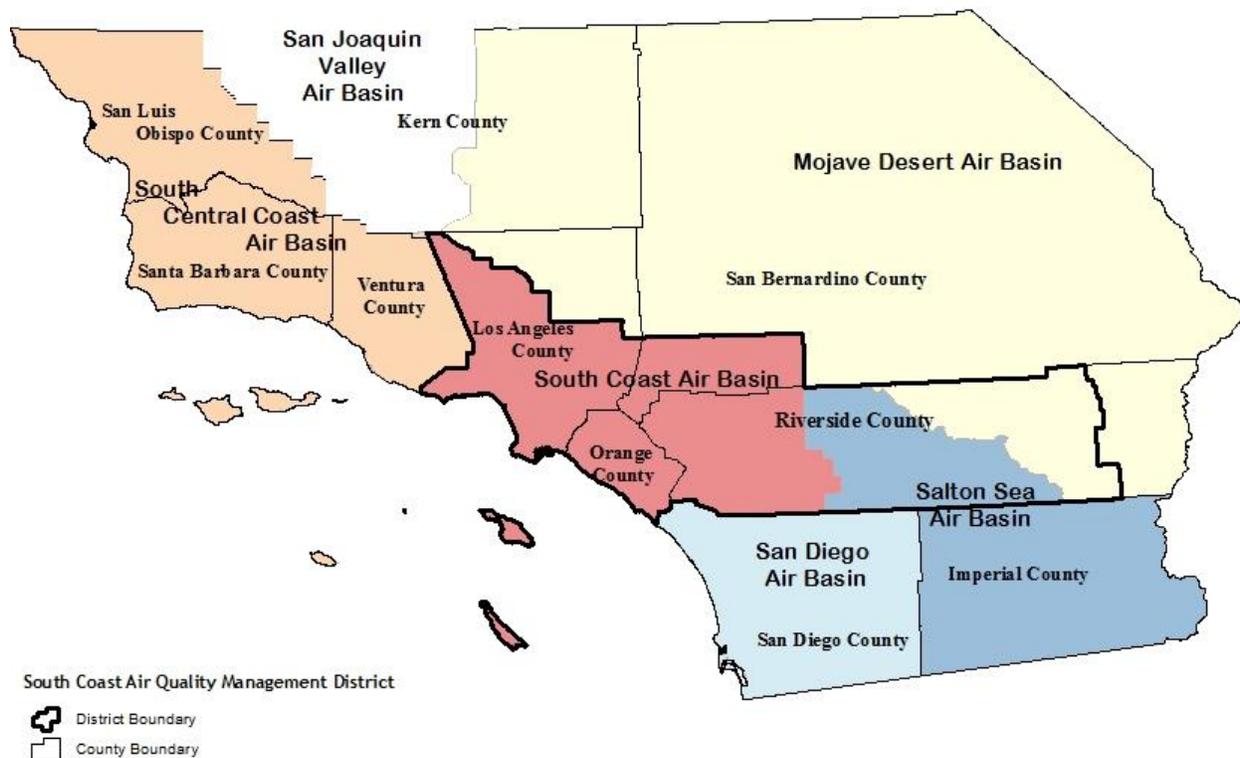
Subsequent to release of the Draft EA for public review and comment, minor modifications were made to PAR 1168 and some of the revisions were made in response to verbal and written comments received during the rule development process. The modifications include: 1) minor changes made for rule clarification, including definition additions and revisions; 2) the addition of technology assessments for various product categories; 3) the reorganization of various provisions and sections of the rule; 4) extended effective dates for proposed VOC limit reductions; and 5) the proposal of more moderate VOC limit reductions for several categories. Staff reviewed the modifications to PAR 1168 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the draft document. The Draft EA concluded no significant adverse environmental impacts and the revisions to PAR 1168 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these minor revisions do not require recirculation of the EA pursuant to CEQA Guidelines Section 15073.5 and 15088.5.

Prior to making a decision on the adoption of PAR 1168, the SCAQMD Governing Board must review and certify the Final EA as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1168.

## PROJECT LOCATION

Adhesives and sealants are used in a wide range of industries and are primarily used for architectural applications. Rule 1168 currently applies to all commercial and industrial sales and applications of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless otherwise exempted by the rule. ~~any person who sells, stores, supplies, offers for sale or manufacturers for sale any regulated products within SCAQMD's jurisdiction.~~ PAR 1168 will clarify that the rule applies applicability to any person who uses, sells, stores, supplies, offers for sale or manufactures for sale any regulated products also include all uses of regulated products within SCAQMD's jurisdiction, unless otherwise exempted by the rule. ~~excluding consumer and institutional use where the units of product, less packaging, weigh less than one pound and consist of less than 16 fluid ounces, and where there is an applicable VOC limit in the California Air Resources Board (CARB) Consumer Products Regulation (CPR).~~ The majority of emissions comes from these uses come from area sources and consumer uses that are occurring throughout the SCAQMD's jurisdiction. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of SCAQMD's jurisdiction, is bounded

by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. A federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 1-1).



**Figure 1-1**  
**Southern California Air Basins**

## PROJECT BACKGROUND

Rule 1168 was first adopted in April 1989 to control VOC emissions from adhesive applications. Rule 1168 has been amended 13 times with the last amendment occurring in January 2005. An adhesive is a substance that is used to bond one surface to another by attachment, excluding the application of subsequent coatings. It is a substance that is sticky in nature and can span a broad range of chemistries from products produced from plants and animals to reactive chemistries. They can vary from contact type adhesives to pressure sensitive adhesives. In 1997, the categories of sealants and sealant primers were incorporated into Rule 1168. Although sealants have are similar properties to adhesives, their primary purpose is not to bond one surface to another, but to except that they must also fill, seal or waterproof gaps or joints between two surfaces. Over the past six amendments, dating back to 1998, Rule 1168 was revised to also include the following

categories of adhesive products: acrylonitrile-butadiene-styrene (ABS), polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC), and Top and Trim Adhesives. Rule 1168 currently limits the VOC content for 41 product categories and is applicable to adhesives and sealants used during manufacturing and to consumer products that are not regulated by CARB in the CPR<sup>7</sup>. The CARB CPR is a statewide regulation applicable to any person who uses, sells, supplies, offers for sale, or manufactures consumer products for us in the state of California and implemented by CARB. A regulated product under Rule 1168 is an adhesive, adhesive primer, sealant, or sealant primer. The majority of emissions come from small volume users (area sources) including manufacturing, commercial, and consumer uses.

Initial development of the current revision to PAR 1168 began in 2013 and continued into 2014. During that timeframe, staff conducted eight working group meetings, drafted six versions of proposed amended rule language, released a preliminary draft staff report, and developed a voluntary survey of regulated product sales in the SCAQMD's jurisdiction. The survey was intended to improve the emissions inventory and assess product market share. At the time of initial development of PAR 1168, a key component in the proposal included dimethyl carbonate (DMC) and tertiary-butyl acetate (tBAc) in the list of compounds that would be exempt from the definition of a VOC. However, due to toxicity concerns and the uncertainty of the on-site exposure modeling methodologies, the rule amendment process was put on hold and SCAQMD staff was directed to research the issues associated with DMC and tBAc and to follow up with a report to the Governing Board. SCAQMD staff subsequently prepared the "tBAc Assessment White Paper"<sup>8</sup> and the Governing Board decided to use a precautionary approach with regard to tBAc and DMC, such that a VOC exemption for DMC and tBAc would not be allowed for inclusion in future rule amendments unless they are found to have known toxic profile factor by the Office of Environmental Health Hazard Assessment (OEHHA). In May 2017, SCAQMD staff resumed work on developing PAR 1168, but without including a proposal to include tBAc and DMC as VOC-exempt compounds.

## PROJECT DESCRIPTION

The purpose of PAR 1168 is to further reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds from regulated products by limiting the VOC content. The proposed limits are based on market trends and market share of low-VOC products and feedback from manufacturers. In the 2016 AQMP, the total VOC emissions inventory from regulated products was estimated to be 4.1 tons per day (tpd). It is important to note that this inventory does not include consumer products subject to the CARB CPR. Also, this inventory does not include emissions from small sources ~~with permits, facilities that do not report as part of the Annual Emissions Reporting (AER) Program; and emissions from small sources that do not have permits~~. Inclusion in the AER Program is limited to larger facilities that emit at least four tons per year of a criteria pollutant. Based on the 2015 AER data, facilities emitted 0.1 tons per day of VOC under Rule 1168, which represents less than one percent of the overall inventory. In addition, survey data was provided by adhesive and sealant manufacturers and suppliers in 2013. Staff scaled the survey data to estimate the contribution by category since only a fraction of the products sold was provided. A growth factor was applied to estimate increased usage (population growth was used as a surrogate for increased usage). It has been determined that the inventory is

<sup>7</sup> CARB, Consumer Products Regulation, March 5, 2015.  
[https://www.arb.ca.gov/consprod/regs/2015/article\\_2\\_final\\_1-22-15.pdf](https://www.arb.ca.gov/consprod/regs/2015/article_2_final_1-22-15.pdf)

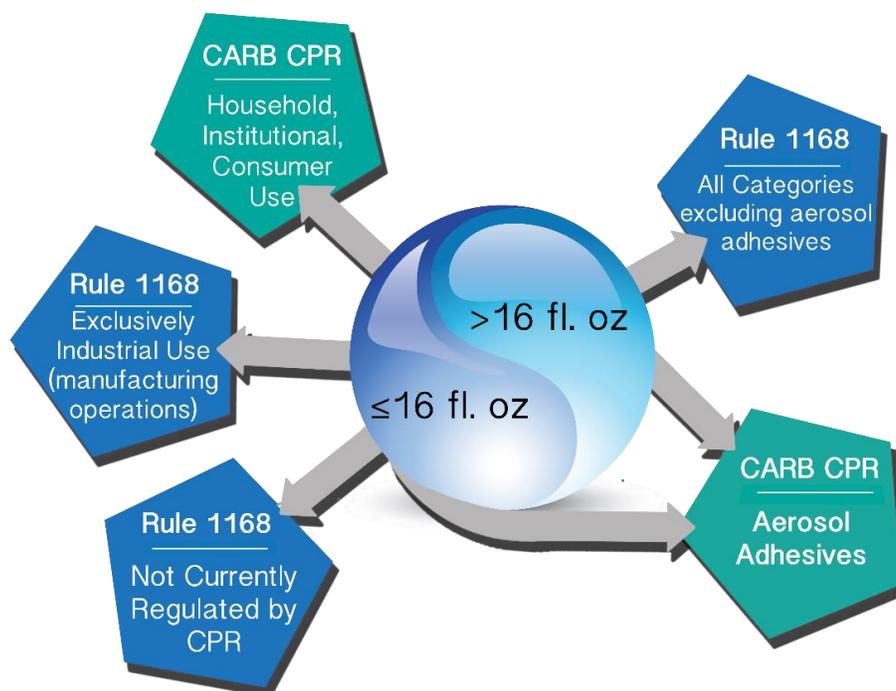
<sup>8</sup> SCAQMD, tBAc Assessment White Paper, April 2017.  
[http://www.aqmd.gov/docs/default-source/planning/tbac/tbac-draft\\_paper.pdf](http://www.aqmd.gov/docs/default-source/planning/tbac/tbac-draft_paper.pdf)

approximately ~~actually closer to~~ 10.5 tpd and, PAR 1168 is anticipated to reduce VOC emissions by 1.43 tpd by 2023.

It is expected products not currently meeting the VOC content limits will be reformulated. In addition, PAR 1168 will: 1) clarify applicability; 2) revise, delete, and add definitions; 3) lower VOC limits for certain product categories and allow for a three-year sell-through and use-through; 4) add new product categories with corresponding VOC content limits; 5) require products marketed for use under varying categories to be subject to the lowest VOC limit; 6) prohibit the storage of non-compliant products, unless for shipment outside of the SCAQMD; 7) add test methods for analyzing VOC content; 8) add labeling requirements; 9) include reporting requirements for manufacturers, private labelers, Big Box retailers, distribution centers, and facilities that use a 55 gallon per year exemption; 10) prohibit the use of Rule 102 Group II exempt solvents, except volatile methyl siloxanes; 11) include a technology assessment for certain product categories; 12) remove, ~~modify~~restrict, or add exemptions; 13) retain ~~include~~ streamlined recordkeeping options for products with a VOC content of less than 20 grams per liter; and 14) allow products with a viscosity of 200 centipoise or greater to retain an ~~be exempted~~ from transfer efficiency requirements. The following is a detailed summary of the key elements contained in PAR 1168. A draft of PAR 1168 can be found in Appendix A.

#### **Purpose and Applicability – subdivision (a)**

Subdivision (a) will clarify that the rule applies to any person who uses, sells, stores, supplies, offers for sale or manufactures for sale any consumer product ~~adhesives, adhesive primers, sealants, and sealant primers, unless otherwise exempted by the rule. not regulated by CARB and to products not used by household and institutional consumers or by manufacturing facilities for repair or maintenance.~~ All categories, excluding aerosol adhesives and aerosol adhesive primers, greater than one pound and consist of greater than 16 fluid ounces are subject to Rule 1168. Products that are one pound ~~(16 fluid ounces)~~ or less, or consist of 16 fluid ounces or less, and have an applicable VOC limit in the CARB CPR would not be regulated by PAR 1168, unless they are incorporated into or used exclusively for manufacturing goods or commodities for sale. ~~Any regulated product that is used exclusively for a business activity or to manufacture goods or commodities for sale would be subject to PAR 1168.~~ In addition, products used in pollution-generating activities that take place at stationary sources (including area sources), excluding maintenance and repair, are subject to PAR 1168. Figure 1-2 summarizes and differentiates the regulated products that would be subject to either PAR 1168 or the CARB CPR.



**Figure 1-2**  
**Comparison of SCAQMD Rule 1168 Applicability to CARB CPR**

### **Definitions (b)**

The following definitions are proposed to be added: ABS to PVC Transition Cement, ABS Welding Cement; Adhesive Tape; Aerosol Product~~Ambient Reactive Cure Adhesive~~; Architectural Appurtenance; Big Box Retailer, Building Envelope; Building Envelope Membrane Adhesives; Clear, Paintable, and Immediately Water-Resistant Sealant, Consumer Products Regulation~~(CPR)~~; CPVC Welding Cement; Dip Coat, Distribution Center; Edge Glue; Electrostatic Application; Energy Curable Adhesives and Sealants; ~~Establishments~~; Flow Coat; Foam Insulation; Foam Sealant, Grout; ~~Institutional Use~~; ~~Insulating Foam~~; Maintenance; Manufacturing; Marine Appurtenances; Non-Staining Plumbing Putty; Ozone-Depleting Compound; Plastic Adhesive Primer; Potable Water Architectural Sealant; Pressure Sensitive Adhesive; Private Labeler; Pump Spray; PVC Welding Cement; Quantity and Emissions Report (QER); Regulated Product; Reinforced Plastic Composite; Repair; Rubber; Rubber Vulcanization Adhesive; Toll Manufacturer; Toxic Air Contaminant (TAC); Vehicle Glass Adhesive Primer; Waterproof Resorcinol Glue.

Changes are proposed to the definitions to clarify the meaning of terms used throughout the rule and to provide more consistency between Rule 1168 and the Ozone Transport (OTC) Commission's Model Rule<sup>9</sup> for Adhesives and Sealants. The OTC is a multi-state organization created under the Clean Air Act and is responsible for advising the U.S. EPA on transport issues and for developing regional solutions to the ground-level ozone problem. The OTC Model Rule for consumer products is applicable to the Northeast and Mid-Atlantic regions as part of a regional effort to attain and maintain the eight-hour ozone standard, and reduce eight-hour ozone levels.

<sup>9</sup> OTC Model Rule for Consumer Products, May 10, 2012.

[http://www.otc.air.org/upload/Documents/Model%20Rules/OTC%20CPR%20Model%20Rule%202012%20CLEAN\\_vs2010.2012%2005%2010.pdf](http://www.otc.air.org/upload/Documents/Model%20Rules/OTC%20CPR%20Model%20Rule%202012%20CLEAN_vs2010.2012%2005%2010.pdf)

The following definitions are proposed to be revised including: Adhesive; Adhesive Primer; Aerosol Adhesive; Architectural Application; Ceramic, Glass, Porcelain, and Stone Tile Adhesive; Contact Adhesive; Cove Base; Cyanoacrylate Adhesive; Grams of VOC Per Liter of Regulated Product, Less Water and Less Exempt Compounds; Grams of VOC Per Liter of Material; Hand Application Methods; High-Volume, Low-Pressure (HVLP) Spray; Indoor Floor Covering Adhesive; Low-Solids; Marine Deck Sealant; Marine Deck Sealant Primer; Modified Bituminous Materials; Outdoor Floor Covering Adhesive; Person; Plastics; Polyethylene Terephthalate (PET, PETE); Polyethylene Terephthalate Glycol (PETG); Polyvinyl Chloride (PVC); Reactive Products; Roll Coater; Sealant; Sealant Primer; Single Ply Roof Membrane Sealant; Tire Tread Adhesive; Traffic Marking Tape; Traffic Marking Tape Adhesive Primer; Transfer Efficiency; Vinyl Compositions Tile.

The default category “Other” is proposed to be included in Table 1 instead of paragraph (c)(1) of the current rule language for clarification. The limit, however, nor the applicability will change from the existing rule.

Additionally, following definitions are proposed to be deleted either because they are obsolete or are redundant in that they restate a dictionary definition without providing additional insight: Adhesive Bonding Primer; Adhesive Primer for Plastic; Adhesive Promoter; Adhesive Solid; Aerosol Spray Can; Aerospace Component; Aircraft; Aircraft Tire Repair; Architectural Sealant or Sealant Primer; Ceramic Tiles; Coating Solid; Foam; Glue; Light Curable Adhesives and Sealants; Low-Solids Adhesive Primer; Nonmembrane Roof Adhesive; Nonmembrane Roof Sealant; Orthotics and Prosthetics; Polyurethane Foams; Primer; Propellant; Rubber Foam; Sheet Applied Rubber Lining Operation; Space Vehicle; Viscosity; Wood Parquet Flooring; Wood Plank Flooring.

### **Requirements – subdivision (c)**

*VOC Limits:* Paragraph (c)(1) lists the VOC limits for multiple categories of adhesives, adhesive primers, sealants and sealant primers. Table 1-1 summarizes the proposed changes to various VOC limits for regulated products that would be subject to PAR 1168. While some most of the proposed new or revised VOC limits in PAR 1168 would go into effect upon the date of the rule adoption and on or before January 1, 2019~~24~~, there are several categories that have VOC limits that would go into effect on January 1, 2023 so as to allow additional time for product reformulation and testing. The following categories were also included to meet the United States Environmental Protection Agency’s (U.S. EPA) reasonably available control measures (RACM) and best available control measures (BACM) requirements: ~~cellulosic plastic welding, SAN welding adhesive,~~ reinforced plastic composite adhesives, and waterproof resorcinol glue. The VOC limit for All Other Plastic Welding Cements is proposed to be reduced to 100 g/L to address RACM/BACM requirements for cellulosic plastic welding and styrene acrylonitrile welding. In addition, PAR 1168 is proposing technology assessments to be conducted for the following categories: Foam Insulation; Foam Sealants; Plastic Welding Cement~~Welding~~, including ABS to PVC Transition Cement~~Welding~~, CPVC Welding Cement~~Welding~~, and PVC Welding Cement~~Welding~~; Roofing products, including All Other Roof Adhesives, Single Ply Roof Membrane Adhesives, All Other Roof Sealants, and Single Ply Roof Membrane Sealants, and Top and Trim Adhesives. The proposed VOC limits for these products are subject to the results of the technology assessments.

**Table 1-1  
Regulated Product Categories and VOC Limits**

Category	VOC Content Limit (g/L) <sup>1</sup>				
	Current	Upon Rule Adoption	1/1/2019	1/1/2021	1/1/2023
<b>Adhesives</b>					
Architectural Applications					
<u>All Other Outdoor Floor Covering Adhesives</u>	150		50		
Plastic Welding					
ABS to PVC Transition Cement	510				<del>425</del> 325 <sup>2*</sup>
CPVC Welding Cement	490				<del>400</del> <sup>2</sup> 325*
PVC Welding Cement	510				<del>425</del> <sup>2</sup> 325*
<u>All Other Plastic Welding Cements-Cement Welding</u>	250		100		
Roofing					
<u>All Other Roof Adhesives</u>	250			200	200 <sup>2</sup>
Single Ply Roof Membrane Adhesive	250			200	200 <sup>2</sup>
Wood Flooring Adhesive	100			20	20
Rubber Vulcanization Adhesive	250	850		250	250
Top and Trim Adhesive	250	540			250 <sup>2</sup>
Waterproof Resorcinol Glue			170		
<b>Substrate Specific Adhesive</b>					
Reinforced Plastic Composite	250		200		
<b>Sealants</b>					
Architectural Applications					
Clear, Paintable, Immediately Water Resistant	250	380		250	250
<u>Foam Insulation</u>	250				50 <sup>3</sup>
Foam Sealant	250	200			50 <sup>3*</sup>
Grout	250	65			
Non-Staining Plumbing Putty	250	150			50
Potable Water <u>Sealant</u>	250	100			
Roofing					
All Other Roof <u>Sealants</u>	300			250	250 <sup>2</sup>
Single Ply Roof Membrane <u>Sealant</u>	450			250	250 <sup>2</sup>
All Other Architectural <u>Sealants</u>	250		50		
All Other Sealants	420			250	250
<b>Adhesive Primers</b>					
Pressure Sensitive	250	785			
Vehicle Glass	250	700			

1. <sup>\*</sup>VOC limits are expressed as grams of VOC per liter of regulated product, less water and less exempt compounds, as defined, except for low-solid regulated products where the VOC limit is expressed in grams per liter of material.

- ~~2. Subject to technology assessment.~~ Technology assessment will be conducted ~~in by January 1, 2022~~ and the Executive Officer shall report on the results of the technology assessment to the Stationary Source Committee prior to the ~~January 1, 2023~~ implementation date.
- ~~3. Technology assessment will be conducted in 2020 and the Executive Officer shall report on the results of the technology assessment to the Stationary Source Committee prior to the implementation date.~~

PAR 1168 proposes to reduce the VOC emissions by lowering the VOC content limits for most of the architectural adhesive and sealant categories. Compliance is expected through the reformulation of regulated products. Also, PAR 1168 proposes to temporarily reinstate the 540 grams per Liter (g/L) VOC limit for Top and Trim Adhesives and to exclude this category from a 55 gallon per year exemption to allow manufacturers time to reformulate to a 250 g/L VOC limit by 2023.

*Regulated Product Categorization:* Paragraph (c)(2) proposes to require products marketed for use under varying categories to be subject to the most restrictive lowest VOC limit of the varying categories. In particular, if anywhere on the regulated product container such as on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the regulated product may be used as, or is suitable for use as, a regulated product for which a lower VOC standard is specified in Table 1 or any other source specific rule application, for which there is a lower VOC standard, then the lowest VOC standard shall apply. However, this requirement would not apply to Substrate Specific Adhesives ~~Applications~~. For example, if a Substrate Specific Adhesive is used to bond dissimilar substrates together, the higher VOC content limit would apply.

*Sell-Through Provision:* Paragraph (c)(3) proposes to allow manufacturers and suppliers to deplete regulated products in the warehouse or on the shelf and allows users to use up any remaining product rather than disposing of them. The sell-through and use-through effective dates should accommodate the typical three year shelf life of these regulated products.

*Disposal of Regulated Products and VOC-Laden Cloth:* Paragraph (c)(4) proposes to require disposal provisions to apply to all regulated products and VOC-laden cloth or paper, instead of only products used for stripping cured adhesives or sealants.

*Solvent Cleaning Operations:* Paragraph (c)(5) proposes to specify that all cleaning operations are subject to Rule 1171 – Solvent Cleaning Operations.

*Transfer Efficiency:* Paragraph (c)(6) proposes minor clarifications for consistency with terms and definitions used throughout PAR 1168. Also, the exclusion for high viscosity regulated products is proposed to be moved to paragraph (i)(~~6~~4).

*Control Devices:* Paragraph (c)(7) proposes the following revisions to be consistent with other VOC rules: 1) to allow the use of an air pollution control device if it reduces VOC emissions by at least 95 percent by weight or the output of the device is not more than 50 ppm VOC by volume, calculated as carbon with no dilution; and 2) the owner or operator demonstrates that the emission collection system collects at least 90 percent by weight of the VOC emissions generated.

*Storage and Mixing:* A new storage prohibition is proposed to be added to paragraph (c)(10) to prohibit the storage of non-compliant regulated products on site unless the regulated products are being stored on site for the purpose of shipment outside of the District. Paragraph (c)(11) is also proposed to be added to require that containers for storage or mixing remain closed except while in use.

### **Methods of VOC Analysis – subdivision (e)**

Three additional VOC content test methods are proposed to be added to subdivision (e), as follows:

- SCAQMD Method 313 – Determination of Volatile Organic Compounds (VOC) by Gas Chromatography-Mass Spectrometry
- ASTM Test Method 6886 (Standard Test Method for Determination of the Weight Percent Individual Volatile Organic Compounds in Water-borne Air-Dry Coatings by Gas Chromatography)
- Appendix A to Subpart PPPP of 40 CFR Part 63 – Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

~~For compliance purposes, when more than one applicable test method or set of test methods are specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods constitutes a violation of the rule.~~

Paragraph (e)(1) clarifies that a test method will not be used if the test method specifically states it is not appropriate for a product type or product chemistry. When a test method specifies it is inapplicable to a product category, it shall not be used for that inapplicable category. The Executive Officer will develop a guidance document to determine which test method will be used when two or more applicable test methods can be used to demonstrate compliance with the rule. The selected test method will be used based on product type, chemistry, and VOC content.

Further, SCAQMD Method 302 is proposed to be removed. Instead, to allow for flexibility for new innovative test methodologies for emerging technologies, paragraph (e)(5) is proposed to be added to include other test methods to be used provided that they have been reviewed to be equivalent by the Executive Officer, CARB, and the U.S. EPA. In addition, paragraph subdivision (e)(6) proposes to clarify that all test methods referenced will be the most recently approved by the appropriate governmental entities.

### **Administrative Requirements – subdivision (f)**

*Labeling:* Paragraph (f)(1) proposes new requirements for labels on regulated products to include VOC content and the date of manufacture, effective January 1, 2019. It is acceptable for the label to identify the VOC content as the maximum VOC allowed for the regulated product category or the maximum anticipated for a product instead of the specific VOC to account for batch-to-batch variations. Products stored in containers with a capacity of one fluid ounce or less and products solely subject to the CARB CPR are exempted from these labeling requirements. For those products subject to both the provisions of this rule and the CARB CPR, the manufacturer may include the VOC content in g/L on supplemental documentation for the product instead.

Additional labeling requirements are proposed for categories with higher VOC limits. The labeling requirement would require the specification of that type of product category's usage only (i.e., "For Top and Trim Uses Only"). This would prevent these products from being used under other product categories or usages. These categories will include:

- ABS to PVC Transition Cement
- Pressure Sensitive Adhesive Primer
- Top and Trim Adhesive
- Rubber Vulcanization Adhesive

*Reporting Requirements:* Paragraph (f)(2) proposes to add requirements to report data of regulated products sold into or within the SCAQMD. The reporting requirements will go into effect on September 1, 2019, and manufacturers and private labelers of regulated products will be required to submit a Quantity and Emission Report (QER) to the SCAQMD every three years, from years 2019 to 2025, and every five years, thereafter, until and including 2040, of the previous ~~two~~ ~~three~~ years sales data. The reporting requirement will sunset in 2040. The QERs will also need to include the product manufacturer name, product name and code, applicable Rule 1168 product category, the grams of VOC per liter of regulated product (less water and exempt solvents)~~regulatory VOC content, the grams of VOC per liter of material VOC content,~~ utilization of sell-through provision (if applicable), designation as to whether or not the product is Low Solids, whether the product type (is water-borne or solvent-based),~~and~~ the total annual volume sold into or within the SCAQMD, including products sold through distribution centers located within or outside the SCAQMD (in gallons of for all container sizes), and whether the product was sold under a specific provision; low-solids product; exemption under subdivision (i); compliance with paragraph (c)(7) – Control Device; and/or compliance with paragraph(c)(8) – Alternative Emission Control.

Big Box ~~r~~etailers and distribution centers will also be required to report to the manufacturer or private labeler. Manufacturers and private labelers, who sell aerosol adhesives and aerosol adhesive primers into or within the SCAQMD, must also submit a report (QER) to the SCAQMD that includes the total weight sold and the percent VOC by weight~~content. However, the VOC content may be given in weight percent, which is consistent with the aerosol units within CARB's VOC limit requirements.~~

Facilities that use regulated products under a 55 gallon per year exemption, as cited in subparagraph (i)(57)(C), will be required to report the volume of products purchased and the name and address of the company where the products were purchased.

~~Lastly,~~ Paragraph (f)(3) includes a proposal that would require manufacturers or suppliers of regulated products to maintain records of VOC content determination. The VOC content determination may be calculated based on product formulation or by using a laboratory analysis. The records must be retained for three years and available upon request. Records for any product with a VOC content of 20 g/L or less may be identified as "20 g/L or less;" otherwise the records should reflect the calculated or analyzed VOC content.

Paragraph (f)(4) allows information submitted for reporting requirements to be designated as confidential.

**Prohibition of Sales and Use – subdivision (g)**

Rule 1168 currently prohibits the sale and use of products containing chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene. Paragraph (g)(23) proposes to also prohibit Rule 102 Group II exempt solvents except VMS in a regulated product for use, supply, sale or offered for sale.

In addition, the following clarifications to paragraph (g)(4) are proposed to the prohibition of sales: ~~1) the prohibition would not apply to products reasonably assumed to be subject to the CARB CPR or to manufacturers or suppliers who inform their distributors in writing that the regulated product is not to be used in the SCAQMD; and 2) notification letters will need to be maintained for three years and made available to the Executive Officer upon request.~~

**Exemptions – subdivision (i)**

The majority of exemptions in subdivision (i) remain the same in PAR 1168; however, subsequent to the release of the Draft EA, the paragraphs have been renumbered or organized into subparagraphs to streamline the section and provide more clarity. In addition, several new paragraphs and/or subparagraphs have been added to provide clarity to the purpose and applicability of the rule.

New paragraph (i)(1) includes existing exemptions that have been renumbered into various subparagraphs. Subparagraph (i)(1)(A) contains proposed revisions to an existing exemption which would Revisions are proposed to an existing exemption in paragraph (i)(2) which would replace the term “aerospace components” with adhesives, adhesive primers, sealants, or sealant primers and associated application processes that would be subject to SCAQMD Rule 1124 – Aerospace Assembly and Component Manufacturing Operations. New subparagraph (i)(15)(B) is proposed to exempt adhesive tape. Subparagraph (i)(1)(C) clarifies that regulated products shipped, supplied, or sold to persons for use outside the District are exempt. New subparagraph (i)(17)(D) is proposed to clarify that distribution centers that do not ship regulated products, aerosol adhesives, or aerosol adhesive primers into the District are exempt.

Revisions are proposed to an existing exemption in renumbered paragraph (i)(24) to clarify that aerosol adhesives and aerosol adhesive primers dispensed from non-refillable aerosol spray systems are subject to reporting requirements in subparagraph (f)(2)(C).

New paragraph (i)(3) exempts certain regulated products from paragraphs (g)(12) and (g)(23). New subparagraph (i)(34)(A) is proposed to exempt products stored in containers with a capacity of one fluid ounce or less. Revisions are proposed to an existing exemption in renumbered subparagraph (i)(38)(B) to clarify that the prohibition of sale for products containing Rule 102 Group II exempt compounds described in paragraph (g)(23) would apply to the exemption for adhesives uses for gluing flowers to parade floats. Revisions are proposed to existing exemptions renumbered in subparagraphs (i)(342)(C) and (i)(43)(D) to clarify that the prohibition of sale of products containing Rule 102 Group II exempt compounds described in paragraph (g)(3) would apply to the exemptions for adhesives used to fabricate orthotics and prosthetics under a medical doctor’s prescription and shoe repair, luggage, and handbag adhesives, respectively.

Revisions are proposed to an existing exemption in renumbered subparagraph (i)(46)(A) to clarify that records shall be kept in accordance with the requirements in subdivision (c4). The existing exemption for solvent welding operations used in the manufacturing of medical devices has been renumbered to subparagraph (i)(4)(B).

The existing exemptions for adhesives used in tire repair or adhesives and or adhesive application processes in compliance with Rules 1104, 1106, 1128, 1130, and 1130.1 have been renumbered to subparagraphs (i)(5)(A) and (i)(5)(B), respectively. Revisions are proposed to an existing exemption in renumbered subparagraph (i)(57)(C) to clarify that a 55 gallon per year exemption will cover a calendar year and will not be available to users of Rubber Vulcanization Adhesives or Top and Trim Adhesives, effective January 1, 2019. New subparagraph (i)(45)(D) is proposed to exempt products used in field installation and repair or potable water linings and covers at water treatment, storage or water distribution facilities from requirements in paragraph (c)(1).

New paragraph (i)(64) is proposed to exempt products with a viscosity of 200 centipoise or greater from paragraph (c)(6).

New paragraph (i)(74) is proposed to exempt products offered for sale as a dry mix, containing no polymer, which are ready for use or only mixed with water prior to use, including, but not limited to grouts, cements, and mortars and to thermoplastic hot melt adhesives from requirements in subdivision (f).

New paragraph (i)(83) is proposed to exempt products with a VOC content of no more than 20 grams per liter, less water and less exempt compounds, or no more than 20 grams per liter material for low-solids products. However, the products will still be subject to subdivisions (f) and (g).

New paragraph (i)(9) proposes to exempt solvent welding formulations containing methylene chloride used to bond hard acrylic, polycarbonate, and polyethylene terephthalate glycol plastic fabrications from requirements in paragraphs (g)(12) and (g)(23) until January 1, 2021. Solvent welding formulations will be exempt provided: 1) the concentration of methylene chloride does not exceed 60 percent by weight; and 2) the purchase of all solvent welding product does not exceed 20 gallons per calendar year at a single facility, as demonstrated with purchase records and invoices. These records will need to be made available to the Executive Officer upon request.

Paragraph (i)(10) is an existing exemption that has been revised to clarify regulated products, weighing one pound or less, or consisting of 16 fluid ounces or less and have VOC limits in the CARB CPR, are not subject to the rule unless these regulated products are incorporated into or used exclusively in the manufacture or construction of the goods or commodities, or used in pollution-generating activities that take place at stationary sources (including areas sources) and excluding maintenance and repair of the stationary source.

New paragraph (i)(11) exempts manufacturers or supplies from regulated products from the requirements in subdivision (g), as long as the products are sold to an independent distributor and informed that the products are not to be used in the SCAQMD. Records would be need to be maintained for three years and available to the Executive Officer.

## **CHAPTER 2**

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### **ENVIRONMENTAL CHECKLIST**

**Introduction**

**General Information**

**Environmental Factors Potentially Affected**

**Determination**

**Environmental Checklist and Discussion**

## INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

## GENERAL INFORMATION

Project Title:	<del>Draft Environmental Assessment for Proposed Amended (PAR) Rule 1168 – Adhesive and Sealant Applications</del>
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Ms. Diana Thai, (909) 396-3443
PAR 1168 Contact Person:	Ms. Nicole Silva, (909) 396-3384
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 1168 would further reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds from adhesives, adhesive primers, sealants and sealant primers. PAR 1168 will clarify applicability; revise, delete, and add definitions; lower VOC limits for certain categories and allow for a three-year sell-through and use-through; add new product categories with corresponding VOC content limits; require products marketed for use under varying categories to be subject to the lowest VOC limit; prohibit the storage of non-compliant products, unless for shipment outside of the SCAQMD; add test methods for analyzing VOC content; add labeling requirements; include reporting requirements for manufacturers, private labelers, Big Box retailers, distribution centers, and facilities that use a 55 gallon per year exemption; prohibit the use of Rule 102 Group II exempt solvents, except volatile methyl siloxanes; include a technology assessment for certain product categories; remove, restrict, or add exemptions; include streamlined recordkeeping options for products with a VOC content of less than 20 grams per liter; and allow products with a viscosity of 200 centipoise or greater to be exempted from transfer efficiency requirements. Some sites affected by PAR 1168 may be identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5. The analysis of PAR 1168 in the <del>Draft</del> -Final EA did not result in the identification of any environmental topic areas that would be significantly adversely affected.

Surrounding Land Uses and Setting: Various

Other Public Agencies Whose Approval is Required: Not applicable

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" involve at least one impact that is a "Potentially Significant Impact". An explanation relative to the determination of impacts can be found following the checklist for each area.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics                               | <input type="checkbox"/> Geology and Soils               | <input type="checkbox"/> Population and Housing             |
| <input type="checkbox"/> Agriculture and Forestry Resources       | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Air Quality and Greenhouse Gas Emissions | <input type="checkbox"/> Hydrology and Water Quality     | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Biological Resources                     | <input type="checkbox"/> Land Use and Planning           | <input type="checkbox"/> Solid and Hazardous Waste          |
| <input type="checkbox"/> Cultural Resources                       | <input type="checkbox"/> Mineral Resources               | <input type="checkbox"/> Transportation and Traffic         |
| <input type="checkbox"/> Energy                                   | <input type="checkbox"/> Noise                           | <input type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION**

On the basis of this initial evaluation:

- I find the proposed project, in accordance with those findings made pursuant to CEQA Guidelines Section 15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.
- I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and, 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: 1) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards; and, 2) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

**Date:** August 11, 2017

**Signature:**



Barbara Radlein  
Program Supervisor, CEQA Special Projects  
Planning, Rules, and Area Sources

## ENVIRONMENTAL CHECKLIST AND DISCUSSION

Rule 1168 applies to any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers, unless otherwise specifically exempted by the rule. Rule 1168 also applies to regulated products that are consumer products not regulated by CARB in the CPR; incorporated into or used exclusively in the manufacture or construction of the goods or commodities; used in pollution-generating activities that take place at stationary sources, excluding maintenance and repair, excluding consumer and institutional use, where the units of product, less packaging, weigh less than one pound and consist of less than 16 fluid ounces, and where there is an applicable VOC limit in the CARB CPR. As discussed in Chapter 1, the main focus of PAR 1168 is to reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds from these products. To accomplish this goal, PAR 1168 proposes to lower the VOC content limits of several categories of regulated products, add new product categories with corresponding VOC content limits, and prohibit the use of Rule 102 Group II exempt solvents (except VMS) from regulated product formulations. In order to comply with PAR 1168, manufacturers are expected to reformulate their regulated products with chemicals that contain less VOCs, less or no toxics, and no stratospheric ozone-depleting compounds. However, while product reformulation may create an environmental benefit, it also is a physical change that may also create secondary adverse environmental impacts.

Also, PAR 1168 proposes to temporarily reinstate the 540 g/L VOC limit for Top and Trim Adhesives and to exclude this category from a 55 gallon per year exemption to allow manufacturers time to reformulate to a 250 g/L VOC limit by 2023. It is important to note that a forgone emissions decrease of 0.21 tpd in the Top and Trim Adhesives category would be expected to occur due to the temporary, proposed reinstatement of 540 g/L VOC limit which is also considered a secondary adverse environmental impact. However, it should be noted that current Top and Trim Adhesives are formulated and complying with a 540 g/L VOC content limit.

While there are other requirements in PAR 1168 that are necessary to support compliance with the rule, the following components of PAR 1168 are administrative or procedural in nature and as such, would not be expected to cause any physical changes: revising, adding, or deleting definitions; clarifying rule language; clarifying applicability, labeling, and recordkeeping requirements; prohibiting the storage of non-compliant products; adding test methods for analyzing VOC content; adding reporting requirements; and including technology assessments. As such, these components of PAR 1168 would not be expected to create any secondary adverse environmental impacts.

For these reasons, the analysis in this EA focuses on the potential secondary adverse environmental impacts associated with product reformulation and temporarily reinstatement of the 540 g/L VOC limit for Top and Trim Adhesives. The effects of implementing these two key rule components in PAR 1168 has been evaluated relative to the environmental topics identified in the following environmental checklist (e.g., aesthetics, agriculture and forestry resources, biological resources, etc.).

Subsequent to the release of the Draft EA for public review and comment, minor modifications were made to PAR 1168 that are described in the Project Description section in Chapter 1. These modifications are indicated in the strikeout/underlined text. Staff has reviewed these modifications and concluded that overall, no new impacts are anticipated to result from these modifications. Further, the impacts previously evaluated in the Draft EA would not be made substantially worse

and the conclusions reached in the Draft EA remain unchanged in the Final EA with respect to the current version of PAR 1168. Thus, staff has concluded that none of the modifications constitute significant new information of substantial importance relative to the Draft EA. In addition, revisions to PAR 1168 in response to verbal or written comments received during the rule development process would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**I. a), b) c) & d) No Impact.** Compliance with PAR 1168 is expected to be met with manufacturers reformulating regulated products by substituting certain chemicals with other chemicals that contain less VOCs, less or no toxics, and no stratospheric ozone-depleting compounds. Physical modifications to or new installations of manufacturing equipment would not be expected to be needed in order to reformulate products. Similarly, since the reformulated products will need to comply with the lower VOC limits and as such, would contribute less to air pollution, modifications to existing or installation of new air pollution control equipment would also not be expected to be necessary in order for manufacturers to reformulate their products in order to comply with the revised VOC limits in PAR 1168. Therefore, implementation of PAR 1168 would not be expected to require any construction to install new or modify existing buildings or other structures that would obstruct scenic resources or degrade the existing visual character of a site, including, but not limited to, trees, rock outcroppings, or historic buildings. Similarly, additional light or glare would not be created which would adversely affect day or nighttime views in the area because no light generating equipment would be required to comply with PAR 1168. Further, the manufacturing of PAR 1168-compliant regulated products would not appreciably change the visual profile of the building(s) where regulated products are manufactured, because any changes to the manufacturing process would occur inside the facility's buildings and not affect the exterior of the structure in any way.

### **Conclusion**

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing PAR 1168. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES.</b> Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Project-related impacts on agriculture and forestry resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**II. a), b), c), & d) No Impact.** Compliance with PAR 1168 is expected to be met with manufacturers reformulating regulated products by substituting certain chemicals with other chemicals that contain less VOCs, less or no toxics, and no stratospheric ozone-depleting compounds. Physical modifications to or new installations of manufacturing equipment would not be expected to be needed in order to reformulate products. Similarly, since the reformulated products will need to comply with the lower VOC limits and as such, would contribute less to air pollution, modifications to existing or installation of new air pollution control equipment would also not be expected to be necessary in order for manufacturers to reformulate their products in order to comply with the revised VOC limits in PAR 1168. For these reasons, implementation of PAR 1168 would not convert farmland to non-agricultural use or conflict with zoning for agriculture use or a Williamson Act contract. Further, the manufacture of compliant regulated products is expected to occur within the confines of existing industrial facilities and would not require converting farmland to non-agricultural uses. Any changes to the manufacturing process (e.g., the substitution of chemicals) would occur inside each affected manufacturer's building(s). Similarly, it is expected PAR 1168 would not result in the loss of forest land or conversion of forest land to non-forest use. Consequently, the proposed project would not create any significant adverse agriculture or forestry impacts.

## Conclusion

Based upon these considerations, significant adverse agriculture and forestry resources impacts are not expected from implementing PAR 1168. Since no significant agriculture and forestry resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS.</b>				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

To determine whether or not air quality and greenhouse gas impacts from implementing PAR 1168 are significant, impacts will be evaluated and compared to the criteria in Table 2-1. PAR 1168 will be considered to have significant adverse impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

**Table 2-1  
SCAQMD Air Quality Significance Thresholds**

<b>Mass Daily Thresholds <sup>a</sup></b>		
<b>Pollutant</b>	<b>Construction <sup>b</sup></b>	<b>Operation <sup>c</sup></b>
<b>NO<sub>x</sub></b>	100 lbs/day	55 lbs/day
<b>VOC</b>	75 lbs/day	55 lbs/day
<b>PM<sub>10</sub></b>	150 lbs/day	150 lbs/day
<b>PM<sub>2.5</sub></b>	55 lbs/day	55 lbs/day
<b>SO<sub>x</sub></b>	150 lbs/day	150 lbs/day
<b>CO</b>	550 lbs/day	550 lbs/day
<b>Lead</b>	3 lbs/day	3 lbs/day
<b>Toxic Air Contaminants (TACs), Odor, and GHG Thresholds</b>		
<b>TACs</b> (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk $\geq$ 10 in 1 million Cancer Burden $>$ 0.5 excess cancer cases (in areas $\geq$ 1 in 1 million) Chronic & Acute Hazard Index $\geq$ 1.0 (project increment)	
<b>Odor</b>	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
<b>GHG</b>	10,000 MT/yr CO <sub>2</sub> eq for industrial facilities	
<b>Ambient Air Quality Standards for Criteria Pollutants <sup>d</sup></b>		
<b>NO<sub>2</sub></b> 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
<b>PM<sub>10</sub></b> 24-hour average annual average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>e</sup> & 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$	
<b>PM<sub>2.5</sub></b> 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>e</sup> & 2.5 $\mu\text{g}/\text{m}^3$ (operation)	
<b>SO<sub>2</sub></b> 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 <sup>th</sup> percentile) 0.04 ppm (state)	
<b>Sulfate</b> 24-hour average	25 $\mu\text{g}/\text{m}^3$ (state)	
<b>CO</b> 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
<b>Lead</b> 30-day Average Rolling 3-month average	1.5 $\mu\text{g}/\text{m}^3$ (state) 0.15 $\mu\text{g}/\text{m}^3$ (federal)	

<sup>a</sup> Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

<sup>b</sup> Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

<sup>c</sup> For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

<sup>d</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

<sup>e</sup> Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day    ppm = parts per million     $\mu\text{g}/\text{m}^3$  = microgram per cubic meter     $\geq$  = greater than or equal to  
MT/yr CO<sub>2</sub>eq = metric tons per year of CO<sub>2</sub> equivalents     $>$  = greater than

Revision: March 2015

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**III. a) Less Than Significant Impact.** The SCAQMD is required by law to prepare a comprehensive district-wide Air Quality Management Plan (AQMP) which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, and to ensure that new sources of emissions are planned and operated to be consistent with the SCAQMD's air quality goals. The AQMP's air pollution reduction strategies include control measures which target stationary, area, mobile and indirect sources. These control measures are based on feasible methods of attaining ambient air quality standards. Pursuant to the provisions of both the state and federal Clean Air Acts, the SCAQMD is also required to attain the state and federal ambient air quality standards for all criteria pollutants.

The most recent regional blueprint for how the SCAQMD will achieve air quality standards and healthful air is outlined in the 2016 AQMP<sup>10</sup> which contains multiple goals of promoting reductions of criteria air pollutants, greenhouse gases, and toxics. In particular, the 2016 AQMP contains control measure CTS-01: Further Emission Reductions from Coatings, Solvents, Adhesives, and Sealants, which identifies Rule 1168 as a VOC rule that has the potential to achieve additional VOC emission reductions. In addition, the 2016 AQMP includes control measure MCS-01: Application of All Feasible Measures Assessment, which seeks to achieve emission reductions from all pollutants.

Compliance with PAR 1168 is expected to occur through the reformulation of regulated products. Manufacturers are expected to reformulate using chemicals that contain less VOCs, less or no toxic compounds, and no stratospheric ozone-depleting compounds to make regulated products that comply with the reduced VOC content requirements and the prohibition of Group II exempt solvents (except VMS) in PAR 1168. Upon full implementation, PAR 1168 is estimated to achieve approximately 1.43 tons per day tpd of VOC emission reductions.

<sup>10</sup> SCAQMD, Final 2016 Air Quality Management Plan, March, 2017. <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf>

For one product category, Top and Trim Adhesives are used to adhere automobile and marine trim, including headliners, vinyl tops, vinyl trim, sunroofs, dash covering, door covering, floor covering, panel covering and upholstery. Staff found emissions increased from the use of these products compared to the estimated reductions proposed in previous versions of the rule, through the use of the volume usage exemption of 55 gallons per year. The emissions were shown to increase by 0.04 tpd. Since 2003, the 250 g/L was delayed twice to allow manufacturers additional time to reformulate, because manufacturers were unable to make Top and Trim Adhesives that could achieve this VOC limit. Delaying compliance with the 250 g/L VOC limit meant that the 540 g/L VOC limit was still in effect. However, the 2003 and 2005 versions of Rule 1168 at that time did not explicitly identify the VOC limit as 540 g/L for Top and Trim Adhesives. It is important to note that a foregone emission decrease of 0.21 tpd in the Top and Trim Adhesives category would be expected to occur due to the temporary, proposed reinstatement of the 540 g/L VOC limit. However, by 2023, the VOC content limit the Top and Trim Adhesives category is proposed to be lowered to 250 g/L, allowing the SCAQMD to maintain the VOC emission reductions previously claimed in the 2003 and 2005 versions of the rule (see Section III. b) and f) for further details). In addition to reinstating the 540 g/L limit, PAR 1168 is also proposing to exclude Top and Trim Adhesives from a 55 gallon per year exemption. This will allow manufacturers time to reformulate to 250 g/L by 2023 and allow the District to maintain the emissions reductions already claimed in previous amendments to the rule.

In addition, PAR 1168 contains a restriction for products marketed for use under varying categories to be subject to the lower VOC limit of the varying categories. This restriction is expected to assure that the lowest VOC containing products are marketed.

For these reasons, PAR 1168 is not expected to obstruct or conflict with the implementation of the 2016 AQMP because the emission reductions from implementing PAR 1168 are in accordance with the emission reduction goals in the 2016 AQMP. PAR 1168 would reduce VOC and toxic emissions and therefore, be consistent with the goals of the 2016 AQMP. Therefore, implementing PAR 1168 to reduce VOC and toxic emissions from regulated products would not conflict with or obstruct implementation of the applicable air quality plans. Attainment of the state and federal ambient air quality standards will protect sensitive receptors and the public in general from the adverse effects of criteria pollutants, including VOCs, which are known to have adverse human health effects. Since no significant impacts were identified for this issue, no mitigation measures are necessary or required.

**III. b) and f) Less Than Significant Impact.** For a discussion of these items, refer to the following analysis.

### **Construction Impacts**

Compliance with PAR 1168 is expected to be met by manufacturers reformulating regulated products. The manufacture of regulated products is expected to use the same or similar equipment currently utilized to manufacturer compliant regulated products. Therefore, the manufacture of regulated products is not expected to require physical changes or modifications that would involve construction activities. As a result, there would be no construction air quality impacts resulting from PAR 1168.

### Operational Impacts

The emission reductions are estimated using the scaled sales volume and reported VOC content emission inventory data collected from the survey. The emission reductions are calculated by assuming the material VOC content of products currently above the proposed limit will be reformulated to meet the proposed VOC limits as indicated in Table 1-1. The estimated emissions reductions are presented in Table 2-2.

**Table 2-2**  
**Estimated Emission Reductions from PAR 1168**

Category	Emission Reductions (tpd)				
	Upon Adoption	2019	2021	2023	Total Reduction (tpd)
<u>All Other Architectural Sealants</u>		0.378			0.378
Clear, Paintable, and Immediately Water Resistant Sealant			0.02	0.02	0.02
CPVC Welding Cement				0.01	0.01
Foam Sealant				0.232	0.232
<u>All Other Roof Adhesives</u>			0.04	0.04	0.04
<u>All Other Roof Sealants</u>			0.15	0.14	0.145
<u>All Other Sealants</u>			0.06	0.06	0.06
PVC Welding Cement				0.1822	0.1822
<u>Rubber Vulcanization Adhesive</u>				0.06	0.06
Single Ply Roof Adhesive			0.06	0.05	0.056
Single Ply Roof Membrane Sealant			0.005	0.003	0.0035
Top and Trim Adhesive	-0.21			0.21	
Wood Flooring Adhesive			0.26	0.24	0.246
<b>Totals:</b>	<b>-0.21</b>	<b>0.378</b>	<b>0.59</b>	<b>1.160.66</b>	<b>1.3843</b>

Compliance with PAR 1168 is expected to be met with manufacturers reformulating regulated products by substituting certain chemicals with other chemicals that contain less VOCs, less or no toxics, and no stratospheric ozone-depleting compounds. Regulated products are expected to be used in a similar fashion to currently compliant regulated products. Physical modifications to or new installations of manufacturing equipment would not be expected to be needed in order to reformulate products. Similarly, since the reformulated products will need to comply with the lower VOC limits and as such, would contribute less to air pollution, modifications to existing or installation of new air pollution control equipment would also not be expected to be necessary in order for manufacturers to reformulate their products in order to comply with the revised VOC limits in PAR 1168. It is important to note that a foregone emission decrease of 0.21 tpd in the Top and Trim Adhesives category would be expected to occur due to the temporary, proposed reinstatement of the 540 g/L VOC limit. By 2023, the VOC content limit will be lowered to 250 g/L, allowing the SCAQMD to maintain the emissions reductions already claimed in the 2003 and 2005 versions of the rule. PAR 1168 is expected to result in an overall VOC emission reduction

of 1.43 tpd and does not exceed any one of the thresholds in Table 2-1. Products are expected to be reformulated with water-borne technology or VOC exempt solvents. In addition, manufacturers are expected to reformulate with less toxic compounds, since Group II exempt solvents (except VMS) will be prohibited. The reduction in VOC content is expected to only affect VOC emissions, i.e., no other criteria pollutant emissions. Therefore, it is not considered to have a significant air quality impact.

### III. c) Less Than Significant Impact.

#### *Cumulatively Considerable Impacts*

Based on the foregoing analysis, since criteria pollutant project-specific air quality impacts from implementing PAR 1168 would not be expected to exceed the air quality significance thresholds in Table 2-1, cumulative air quality impacts are also expected to be less than significant. SCAQMD cumulative significance thresholds are the same as project-specific significance thresholds. Therefore, potential adverse impacts from implementing PAR 1168 would not be “cumulatively considerable” as defined by CEQA Guidelines Section 15064(h)(1) for air quality impacts. Per CEQA Guidelines Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.

The SCAQMD guidance on addressing cumulative impacts for air quality is as follows: “As Lead Agency, the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR.” “Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.”<sup>11</sup>

This approach was upheld by the Court in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the South Coast Air Quality Management District’s established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines Section 15064.7, stating, “The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect.” The court found that, “Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria...” “Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact.” As in *Chula Vista*, here the SCAQMD has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established SCAQMD significance thresholds. See also, *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal. App. 4th 899. Here again the court upheld the SCAQMD’s approach to utilizing the established air quality significance thresholds to

<sup>11</sup> SCAQMD Cumulative Impacts Working Group White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, August 2003, Appendix D, Cumulative Impact Analysis Requirements Pursuant to CEQA, at D-3. <http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf>.

determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the proposed project will not contribute to a significant unavoidable cumulative air quality impact.

**III. d) Less Than Significant Impact.** Compliance with PAR 1168 is expected to be met with the reformulation of regulated products. Reformulated regulated products are expected to be used in a similar fashion to compliant regulated products. Products are expected to be reformulated with water-borne technology or VOC exempt solvents. In addition, manufacturers are expected to reformulate with less toxic compounds and non-ozone-depleting compounds, since Group II exempt solvents (except VMS) will be prohibited. PAR 1168 is expected to result in an overall VOC emission reduction of 1.43 tpd. The reduction in VOC content is expected to only affect VOC emissions, i.e., no other criteria pollutant emissions. Sensitive receptors are not expected to be exposed to substantial pollutant concentrations from the implementation of PAR 1168 for the following reasons: 1) as analyzed in Section III. b) and f), there are no operational increases of VOC emissions associated with PAR 1168; 2) implementing PAR 1168 is expected to reduce VOC emissions in the SCAQMD by approximately 1.43 tpd by 2023; 3) products are expected to be formulated with replacement chemicals that contain less VOCs, less or no toxics, and no stratospheric ozone-depleting compounds than what are currently used in products regulated by PAR 1168; and 4) the use of future compliant materials must comply with all applicable SCAQMD rules and regulations. By achieving these VOC emission reductions, VOC concentrations are expected to be lessened as a result of implementing PAR 1168. As such, any future exposures to sensitive receptors from implementing PAR 1168 is expected to be lessened (a benefit) when compared to the existing setting. Further, as previously explained in Section III. a), attainment of the state and federal ambient air quality standards will protect sensitive receptors and the public in general from the adverse effects of criteria pollutants, including VOCs, which are known to have adverse human health effects. For these reasons, implementation of PAR 1168 is not expected to expose sensitive receptors to substantial pollutant concentrations. Therefore, no significant adverse air quality impacts to sensitive receptors are expected from implementing PAR 1168.

### **III. e) Less Than Significant Impact.**

#### ***Odor Impacts***

Odor problems depend on individual circumstances. For example, individuals can differ quite markedly from the populated average in their sensitivity to odor due to any variety of innate, chronic or acute physiological conditions. This includes olfactory adaptation or smell fatigue (i.e., continuing exposure to an odor usually results in a gradual diminution or even disappearance of the smell sensation).

During the manufacturing process, manufacturers may utilize some replacement solvents (e.g., parachlorobenzotrifluoride (PCBTF)) that may individually have a distinct aromatic odor. Currently, PCBTF is allowed to be used in formulations and odor has not been an issue for these products. Replacing other chemicals with solvents, such as PCBTF, would not necessarily cause more of an issue with odor, because once a replacement chemical is blended with other components, the end product may have an entirely different odor profile that could lessen the distinct odor. Thus, if other chemicals with distinct odors are used for reformulation under PAR 1168, odor issues would not be expected to be a problem. Further, if water is used to replace other VOC-containing chemicals as part of reformulation, water does not have an appreciable odor. Thus, products that are reformulated with water would be expected to have a less distinct overall

odor than products made with VOC-containing chemicals. For these reasons, reformulated products made to have lesser amounts of VOC-containing materials would not be expected to have appreciably increased or different odor impacts than the currently used materials. Furthermore, local governments typically have ordinances that are intended to protect the public from adverse odors. SCAQMD Rule 402 – Nuisance, also protects the public from adverse odor impacts. During construction, manufacturers would have ventilation systems vented to air pollution control equipment and require employees to wear personal protective equipment to protect from odors. However, no construction is expected since reformulation of products will take place within existing manufacturer's building(s). For these reasons, odor impacts from the reformulation of products is not expected to create significant adverse objectionable odors during construction or operation. Since no significant impacts were identified for this issue, no mitigation measures for odors are necessary or required.

### **III. g) and h) No Impact.**

#### ***Greenhouse Gas (GHG) Impacts***

Significant changes in global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming. State law defines GHG to include the following: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) (Health and Safety Code Section 38505(g)). The most common GHG that results from human activity is CO<sub>2</sub>, followed by CH<sub>4</sub> and N<sub>2</sub>O.

Traditionally, GHGs and other global warming pollutants are perceived as solely global in their impacts and that increasing emissions anywhere in the world contributes to climate change anywhere in the world. A study conducted on the health impacts of CO<sub>2</sub> "domes" that form over urban areas cause increases in local temperatures and local criteria pollutants, which have adverse health effects<sup>12</sup>.

The analysis of GHGs is a different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants, the significance thresholds are based on daily emissions because attainment or non-attainment is primarily based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health (e.g., one-hour and eight-hour standards). Since the half-life of CO<sub>2</sub> is approximately 100 years, for example, the effects of GHGs occur over a longer term which means they affect the global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate the effects of GHGs over a longer timeframe than a single day (i.e., annual emissions). GHG emissions are typically considered to be cumulative impacts because they contribute to global climate effects.

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<sup>12</sup> Jacobsen, Mark Z. "Enhancement of Local Air Pollution by Urban CO<sub>2</sub> Domes," Environmental Science and Technology, as describe in Stanford University press release on March 16, 2010 available at: <http://news.stanford.edu/news/2010/march/urban-carbon-domes-031610.html>.

Compliance with PAR 1168 is expected through manufacturers reformulating regulated products. As explained in Section III. b) and f), implementation of PAR 1168 is not expected to involve or require construction activities that would utilize GHG emitting combustion equipment. Further, the types of chemicals that are used for reformulating products in order to reduce the content of VOCs, toxics, and stratospheric ozone-depleting substances do not contain any GHG compounds (e.g., CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>). Therefore, PAR 1168 is not expected to generate GHG emissions either directly or indirectly, that may have a significant impact on the environment. Further, as noted in Section III. a), implementation of PAR 1168 would not be expected to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing criteria pollutants and the same is true for GHG emissions since GHG emissions would not be impacted in any way by PAR 1168. Therefore, GHG impacts are not considered significant.

### **Conclusion**

Based upon these considerations, significant air quality and GHG emissions impacts are not expected from implementing PAR 1168. Since no significant air quality and GHG emissions impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b>				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**IV. a), b), c), & d) No Impact.** The proposed project does not require the acquisition of land to comply with the provisions of PAR 1168. Further, compliance with PAR 1168 would be expected to be met with manufacturers reformulating regulated products within their existing structures and facilities. The manufacture of regulated products is expected to use the same or similar equipment currently utilized to manufacturer compliant regulated products. Therefore, the manufacture of regulated products is not expected to require physical changes or modifications that would involve construction activities to install new or modify existing manufacturing equipment or air pollution control equipment. Thus, PAR 1168 is not expected to adversely affect in any way habitats that support riparian habitat, federally protected wetlands, or migratory corridors. Similarly, since implementing PAR 1168 would not require the construction of any structures, special status plants, animals, or natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service are not expected to be adversely affected. The reformulation of regulated products to comply with PAR 1168 are similar to the formulation in existing compliant regulated products except the reformulated regulated products are expected to be formulated with water, low-solvent, VOC exempt solvents, or less toxic solvents to meet the lower VOC content limits and comply with existing toxic rules

(e.g., SCAQMD Rules 1401 and 1402). In addition, PAR 1168 prohibits the use of Group II exempt solvents (except VMS), which would lower the toxic emissions from regulated products. Therefore, PAR 1168 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD.

**IV. e) & f) No Impact.** The proposed project is not expected to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans because PAR 1168 does not require the construction of any new or modified structures or new development in undeveloped areas. Additionally, PAR 1168 would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because compliance with PAR 1168 would involve reformulation of regulated products in previously disturbed areas which are not typically subject to Habitat or Natural Community Conservation Plans.

### **Conclusion**

Based upon these considerations, significant biological resource impacts are not expected from implementing PAR 1168. Since no significant biological resource impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufacturers for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent

manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**V. a), b), c), d) & e) No Impact.** No construction-related activities to existing manufacturing facilities would be associated with the implementation of PAR 1168; therefore, no impacts to historical or cultural resources are anticipated to occur. Further, PAR 1168 is not expected to require physical changes to the environment, such as construction, which may disturb paleontological or archaeological resources or disturb human remains interred outside of formal cemeteries. PAR 1168 is not expected to require physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, PAR 1168 is not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. For these reasons, PAR 1168 is not expected to cause any substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

As part of releasing this CEQA document for public review and comment, the SCAQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code Section 21080.3.1(b)(1). The NAHC notification list provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the SCAQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code Section 21080.3.1(b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code Section 21082.3(a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached [see Public Resources Code Section 21080.3.2(b)(1)-(2) and Section 21080.3.1(b)(1)].

## Conclusion

Based upon these considerations, significant adverse cultural resources impacts are not expected from implementing PAR 1168. Since no significant cultural resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VI. ENERGY.</b> Would the project:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new

or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**VI. a), b), c), d) & e) No Impact.** The manufacturing of reformulated regulated products is expected to utilize similar equipment currently used to manufacture compliant regulated products. Regulated products that are reformulated are expected to be used and applied in a similar fashion to compliant regulated products. PAR 1168 is not expected to require physical changes or modifications that involve construction activities. Those who manufacture or use compliant regulated products are expected to comply with any relevant existing energy conservation plans and standards, and implementation of PAR 1168 would not require changes to existing energy conservation plans and standards. As a result, PAR 1168 would not conflict with adopted energy conservation plans, create a need for new or substantially altered power or natural gas utility systems, or create any significant adverse effects on peak and base period demands for electricity, natural gas, or other forms of energy, or adversely affect energy producers or energy distribution infrastructure. PAR 1168 would also not create any significant effects on peak and base period demands for electricity or other forms of energy.

### **Conclusion**

Based upon these considerations, significant adverse energy impacts are not expected from implementing PAR 1168. Since no significant energy impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction, or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**VII. a) No Impact.** PAR 1168 would not result in any construction activities. The manufacture or use of regulated products would be expected to take place at existing settings that are not expected to substantially change as a result of the proposed rule. Thus, PAR 1168 would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death involving the rupture of an earthquake fault, seismic ground shaking, ground failure or landslides is not anticipated.

**VII. b) No impact.** PAR 1168 would not require the installation of new or the modification of existing manufacturing equipment, air pollution control equipment or any structures. Since PAR 1168 does not involve construction activities whatsoever, no soil disruption from excavation, grading, or filling activities; changes in topography or surface relief features; erosion of beach sand; or changes in existing siltation rates are anticipated from the implementation of this proposed project.

**VII. c) No Impact.** Since PAR 1168 would not require any construction activities, no excavation, grading, or filling activities would be expected to occur in order to comply with the proposed project. For these reasons, subsidence is not anticipated to be a problem. Further, the proposed project would not require the drilling or removal of underground products (e.g., water, crude, oil, etc.) that could produce subsidence effects. Since no groundwork or earth moving activities would

be required as part of PAR 1168, no new landslide effects or changes to unique geologic features would occur.

**VII. d) & e) No Impact.** Since PAR 1168 would not require the installation of new or the modification of existing manufacturing equipment, air pollution control equipment or any structures, no earth-moving activities would be expected to occur. Therefore, no persons or property will be exposed to new impacts related to expansive soils or soils incapable of supporting water disposal. Further, PAR 1168 would not require the installation of septic tanks or other alternative wastewater disposal systems. The main effect of the proposed project would be to lower the VOC content limits. Thus, implementation of PAR 1168 will not adversely affect soils associated with a installing a new septic system or alternative wastewater disposal system or modifying an existing sewer.

### **Conclusion**

Based upon these considerations, significant adverse geology and soils impacts are not expected from the implementation of PAR 1168. Since no significant geology and soils impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**VIII. a), b), & c) Less than Significant Impact.** PAR 1168 does not include any provisions that would directly or indirectly dictate the use of any specific regulated product formulations with the exception of prohibiting Group II exempt solvents (except VMS), which are, or are potentially toxic or contain stratospheric ozone-depleting compounds. Manufacturers will have the flexibility to choose the product formulation that best suits their needs.

A number of physical or chemical properties may cause a substance to be a fire hazard. With respect to determining whether any conventional or replacement solvent is a fire hazard, Product Data Sheets (PDS) lists the National Fire Protection Association (NFPA) 704 flammability hazard ratings. NFPA 704 is a “standard (that) provides a readily recognized, easily understood system for identifying flammability hazards and their severity using spatial, visual, and numerical methods to describe in simple terms the relative flammability hazards of a material<sup>13</sup>. However, there are limitations to the NFPA 704 rating system, because a substance can have the same NFPA 704 flammability rating code. Other factors can make a substance's fire hazard different from each

<sup>13</sup> National Fire Protection Association, FAQ for Standard 704. [http://www.nfpa.org/assets/files/aboutthecodes/704/704\\_faqs.pdf](http://www.nfpa.org/assets/files/aboutthecodes/704/704_faqs.pdf)

other, depending on its chemical characteristics. Flashpoint is a particularly important measure of the fire hazard of a substance. The Consumer Products Safety Commission (CPSC) promulgated Labeling and Banning Requirements for Chemicals and Other Hazardous Substances in U.S.C. Section 1261 and 16 CFR Part 1500 is based on flammability and flash point.

Current regulated products are water-borne (minimal VOC) or use the following VOC-containing solvents in their formulations: acetone, methyl ethyl ketone (MEK), tetrahydrofuran (THF), PCBTF, xylene, cyclohexane, hexane, heptane, and toluene. If these regulated products are reformulated, some more will likely become water-borne (minimal VOC) or use low-VOC solvents. Others could use solvents currently used in other formulations. Thus, manufacturers are already handling and working with solvents that have potential hazard impacts. Procedures to mitigate those hazards are already in place. Besides water, potential solvents used in reformulations of regulated products may include, but are not limited to the following chemicals:

#### Acetone

Acetone is a colorless, highly volatile liquid that has a fragrant, mint-like odor. It is a manufactured chemical that is also found naturally in the environment. It occurs naturally in plants, trees, volcanic gases, forest fires, and as a product of the breakdown of body fat. It is present in vehicle exhaust, tobacco smoke, and landfill sites. Acetone is used to make plastic, fibers, drugs, and other chemicals. It is also used to dissolve other substances. Industrial processes contribute more acetone to the environment than natural processes. Common uses for acetone are nail polish removers and for thinning paint. It has a high solvent strength greater than the other types of solvents, except for xylene, which has a similar solvent strength. Acetone is widely available at retail stores that sell solvents.

1. As a VOC: Acetone is currently listed as a Group I exempt VOC pursuant to SCAQMD Rule 102 – Definition of Terms, because it does not contribute appreciably to ozone formation. Acetone was originally “delisted” as a VOC by the U.S. EPA in 1995.
2. Flammability: Acetone has the lowest flash point, -4 degrees Fahrenheit (°F) (below freezing,) and is the most flammable of all the solvents considered in PAR 1168. Acetone, along with the majority of other solvents except for PCBTF, is rated “three” for flammability by the National Fire Protection Association (NFPA) which means that it is considered to be highly flammable. However, because of the ultra-low flash point, labeling requirements pursuant to the CPSC classifies acetone as “extremely flammable.”

#### PCBTF

PCBTF is a colorless liquid with a distinct aromatic odor. It is commonly used as an ink solvent in the printing industry and is sold under the brand name Oxsol 100. PCBTF had originally been used as an intermediate in the production of other compounds, but more recently has been marketed as a cleaning solvent and paint thinner. Because it is only manufactured in a limited number of countries overseas (e.g., China), it is considered to be expensive due to high shipping costs relative to other possible solvent replacements.

1. As a VOC: Exempt pursuant to U.S. EPA and listed as exempt in Rule 102, Group I.
2. Flammability: PCBTF, like mineral spirits, has a relatively high flash point at 109 °F (well above typical ambient temperatures) when compared to acetone, and as such, is one of the least flammable of all the solvents considered in PAR 1168. PCBTF, is the only solvent

that is rated “one” for flammability by the NFPA which means that it is considered to be slightly flammable or combustible if heated. Because of its high flash point range, labeling requirements pursuant to the CPSC classifies PCBTF as “combustible.”

The flammability and the associated hazards of each reformulated product is directly dependent upon which substitute solvents are used and which existing solvents are replaced. There are solvents that can be used to reformulate products that would comply with the lower VOC content limits contained in PAR 1168 but that may also be flammable, such as acetone or PCBTF, which is less flammable than acetone. Water, which is not flammable, could also be used to reformulate products. It is important to note that acetone, PCBTF and water are all currently used for manufacturing products that comply with the current version of Rule 1168. In any case, SCAQMD staff is unable to predict or forecast which chemicals would be selected by manufacturers as replacements solvents and how much of these chemicals would be used. Moreover, SCAQMD staff is also unable to predict or forecast the flammability of future reformulations. Therefore, in accordance with CEQA Guidelines Section 15145, an evaluation of the flammability of each future reformulated product is concluded to be speculative and will not be evaluated further in this analysis. PAR 1168 will also prohibit the use of Group II exempt compounds (except VMS), thus limiting and reducing the potential for products to be reformulated with toxic or stratospheric ozone-depleting chemicals.

It is anticipated that the current extensive and comprehensive regulatory requirements regarding flammable and otherwise hazardous materials will not need to be amended as a result of the proposed project since, in part, acetone is already widely distributed, sold and used. Based on the preceding information, it is also expected that implementing PAR 1168 is not expected to increase or create any new hazardous emissions which would adversely affect existing or proposed schools. In fact, to the extent that manufacturers, schools and other users replace the regulated products formulated with conventional VOC-containing solvents with reformulated products made with water, acetone, PCBTF or other minimal VOC chemicals, any existing hazardous emissions, including those near one-quarter mile of any schools, would be expected to remain unchanged or would be reduced with regard to hazardous characteristics.

Therefore, PAR 1168 is not expected to create a significant hazard to the public or environment through the routine transport, use, and disposal of hazardous materials; create a new significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment; emit new hazardous emissions, or handle hazardous or acutely hazardous materials, substances or waste within one quarter mile of an existing or proposed school; or significantly increase fire hazard in areas with flammable materials.

**VIII. d) No Impact.** Government Code Section 65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). Current regulated products are water-borne (minimal VOC) or use the following VOC-containing solvents in their formulations: acetone, methyl ethyl ketone (MEK), tetrahydrofuran (THF), PCBTF, xylene, cyclohexane, hexane, heptane, and toluene. While there are manufacturing facilities that are identified on lists of California Department of Toxics Substances Control hazardous waste facilities per Government Code Section 65962.5, PAR 1168 would not change how these facilities comply with their current hazardous waste handling practices. In fact, any facility that is subject to the requirements in Government Code Section 65962.5 would still be required need to comply with any regulations relating to that code section irrespective of whether PAR 1168 is

implemented. For this reason, PAR 1168 is not expected to have direct impacts on any facilities subject to the requirements in Government Code Section 65962.5

In general, the purpose of PAR 1168 is to achieve VOC emission reductions through reformulation of regulated products, which will ultimately improve air quality and reduce adverse human health impact related to poor air quality. Further, since products are to be reformulated with less hazardous components (e.g., chemicals that contain less VOCs, toxics and stratospheric ozone-depleters) than what is currently available, PAR 1168 may have the added beneficial effect of reducing the amount of unused regulated products that are disposed of as hazardous waste. Nonetheless, the use of PAR 1168 compliant regulated products is not expected to interfere with existing hazardous waste management programs since facilities handling hazardous waste would be expected to continue to manage any and all hazardous materials and hazardous waste, in accordance with applicable federal, state, and local rules and regulations. Therefore, compliance with PAR 1168 would not create a new significant hazard to the public or environment.

**VIII. e) No Impact.** It is expected compliance with PAR 1168 will result in the reformulation of regulated products. No construction activities are expected from the implementation of PAR 1168. Therefore, it is not expected to increase or create any new safety hazards to peoples working or residing in the vicinity of public/private airports.

**VIII. f) No Impact.** Health and Safety Code Section 25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
- Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
- Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
- Procedures to notify the necessary persons who can respond to an emergency within the facility;
- Details of evacuation plans and procedures;
- Descriptions of the emergency equipment available in the facility;
- Identification of local emergency medical assistance; and,
- Training (initial and refresher) programs for employees in:
  1. The safe handling of hazardous materials used by the business;
  2. Methods of working with the local public emergency response agencies;
  3. The use of emergency response resources under control of the handler;
  4. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

Compliance with PAR 1168 is expected through the reformulation of regulated products. Manufacturing practices and the usage of reformulated regulated products in accordance with PAR 1168 are not expected to change from existing manufacturing practices and usage of current compliant products. Further, PAR 1168 contains no requirements that would pertain to or alter any adopted emergency response plans or emergency evacuation plans that may be in place at facilities that manufacture or use the regulated products. Therefore, PAR 1168 is not expected to impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

**VIII. g) No Impact.** Compliance with PAR 1168 is expected through the reformulation of regulated products. The facilities affected by PAR 1168 are typically located in existing industrial, commercial or mixed land use areas and are not located near wildlands; therefore, PAR 1168 is not expected to be significant for exposing people or structures to risk of loss, injury or death involving wildland fires.

**VIII. h) Less Than Significant Impact.** The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations. Further, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against the potential risk of upset. PAR 1168 would not change the existing requirements and permit conditions for the proper handling of flammable materials. Further, PAR 1168 does not contain any requirements that would prompt facility owners/operators to begin using new flammable materials. In addition, the National Fire Protection Association has special designations for deflagrations (e.g., explosion prevention) when using materials that may be explosive. Therefore, for liability reasons, it is unlikely that manufacturers would elect to reformulate products that may have explosive properties without first ensuring that there are explosion control systems and employee safety procedures and protections in place. Additional information pertaining to these types of protective measures is available in Chapter 8 of the *Industrial Ventilation, A Manual for Recommended Practice for Design*, 28<sup>th</sup> Edition, published by the American Conference of Governmental Industrial Hygienists, ©2013.

## **Conclusion**

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not expected from implementing PAR 1168. Since no significant hazards and hazardous materials impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?              | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

#### Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

#### Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**IX. a) & i) Less than Significant Impact.** Lowering the VOC content limit of coatings will not be expected to have any direct or indirect impact on water quality because the reformulation of regulated products is not expected to change the current regulated product practices or alter the regulated product formulations to be more detrimental to water quality. Although compliance of PAR 1168 is expected to be through the reformulation of regulated products, PAR 1168 does not specify or dictate the type of solvent that need to be used or that water-borne technology must be used for reformulation. For any regulated products that are reformulated with water, water will also be needed for clean-up purposes, in lieu of solvent-based clean up materials. Similarly, wastewater from cleaning up water-borne reformulations could be disposed of into the public sewer system, in lieu of disposal as hazardous waste. It is important to note that PAR 1168 also contains a sell-through and use-through provision such that PAR 1168 will not create a new need to dispose of unused materials that do not comply with PAR 1168 upon adoption. Of course, when there is unused material under the current version of Rule 1168, contractors and businesses using regulated products either dispose of waste material according to the specifications in the manufacturer's product data sheets or recycle the waste material, such that unused materials are not disposed of via wastewater. Under PAR 1168, these practices would not be expected to change. In addition, SCAQMD rules that regulate VOC emissions, including Rule 1113 – Architectural Coatings<sup>14</sup>, Rule 1107 – Coating of Metal Parts and Products<sup>15</sup>, and Rule 1151 –

<sup>14</sup> Final Environmental Assessment for Proposed Amended Rule 1113 – Architectural Coatings, February 2016.  
<http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/par-1113-final-ea2.pdf>

<sup>15</sup> Final Environmental Assessment for Proposed Amended Rule 1107 – Coating of Metal Parts and Products, October 2005.  
<http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2005/final-ea-for-proposed-amended-rule-1107.pdf>

Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations<sup>16</sup>, were previously amended to lower VOC content limits via reformulation of solvent-based coatings to lower VOC coatings or water-borne coatings was anticipated and occurred; these amendments and the corresponding CEQA documents analyzing the effects on water quality did not result in significant adverse impacts to water quality. In practice, the coatings subject to these rules were successfully reformulated with water-borne technology and no adverse effects to water quality, wastewater treatment, or wastewater treatment capacity occurred during implementation. For these reasons, reformulation of regulated products as a result of implementing PAR 1168 would not be expected to violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality. Further, implementation of PAR 1168 would also not be expected to result in a determination by the wastewater treatment provider which serves or may serve the manufacturers and users of the reformulated regulated products that there is not adequate existing capacity to serve any additional wastewater that may be generated from using water for cleaning up.

**IX. b) Less than Significant Impact.** SCAQMD staff is unable to predict or forecast whether any manufacturers will have access to groundwater and whether the groundwater will be of a sufficient quality or supply to be used for reformulation of regulated products. Nonetheless, although very unlikely, if a manufacturer has a well on its property, groundwater may be used for reformulating regulated products provided that the property owner has groundwater pumping rights, a sufficient supply, and the groundwater is of a suitable quality for manufacturing. In general, the quality of groundwater is typically not suitable for usage in the manufacturing of regulated products, unless it has been treated to meet the quality assurance and quality control of strict manufacturing standards. Manufacturers of regulated products typically use potable water water-borne formulations of regulated products. In addition, as explained in Section IX. a), for past rule amendments that have relied on similar reformulation technology, the water demand to reformulate regulated products has not resulted in a significant adverse impact on groundwater supplies. Thus, PAR 1168 is not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

**IX. c) & d) No Impact.** The manufacturing and application of regulated products that are reformulated pursuant to PAR 1168 is expected to take place at existing locations and settings. As with currently regulated products under existing Rule 1168, the manufacturing of reformulated regulated products in accordance with PAR 1168 will continue to occur at existing facilities whose process lines operate within enclosed buildings. Similarly, the application and use of reformulated products are expected to be used in the same manner as the currently regulated products under existing Rule 1168 (e.g., inside existing buildings). Further, as explained in Section IX. a), contractors and businesses using regulated products either dispose of waste material according to the specifications in the manufacturer's product data sheets or recycle the waste material, such that unused materials are not improperly disposed of.

For these reasons, implementation of PAR 1168 would not be expected to: 1) substantially alter the existing drainage pattern of the site or area where reformulated regulated products are

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<sup>16</sup> Final Environmental Assessment for: Proposed Amended Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, November 2005.

<http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2005/final-ea-par1151.doc>

manufactured or used, including through alteration of the course of a stream or river, or 2) substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site. In addition, PAR 1168 would also not be expected to create new or contribute to existing runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

**IX. e) & f) No Impact.** As explained in Section IV. e) and f), PAR 1168 would not require the construction of any new or modified structures or new development in undeveloped areas. Compliance with PAR 1168 is expected to be through the reformulation of regulated products to meet VOC content limits. As with currently regulated products under existing Rule 1168, the manufacturing of reformulated regulated products in accordance with PAR 1168 will continue to occur at existing facilities whose process lines operate within enclosed buildings. Similarly, the application and use of reformulated products are expected to be used in the same manner as the currently regulated products under existing Rule 1168 (e.g., inside existing buildings). Therefore, PAR 1168 would not be expected to cause placing housing or structures to be placed within 100-year flood hazard areas as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows. Similarly, PAR 1168 would also not be expected to expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow because any flood event of this nature would be part of the existing setting or topography that is present for reasons unrelated to PAR 1168.

**IX. g) No Impact.** As explained previously, since compliance with PAR 1168 is expected to be through the reformulation of regulated products to meet VOC content limits, PAR 1168 would not require the construction of any new or modified structures or new development. Thus, PAR 1168 would also not require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or the expansion of existing facilities.

**IX. h) Less Than Significant Impact.** While compliance with PAR 1168 is expected to be through the reformulation of regulated products to meet VOC content limits, it is unknown at this time how many types of regulated products manufacturers will elect to reformulate with water and how much water will be needed to do so. However, as explained in Section IX. a) and i), CEQA evaluations were conducted for previous amendments to other VOC-based rules (e.g., Rules 1107, 1113, and 1151) which also proposed to lower VOC content limits via reformulation similar to what is expected to occur with PAR 1168. The water demand analyses in these CEQA documents concluded that the existing water supplies were sufficiently available for the reformulation of regulated products without the need for new or expanded entitlements. For this reason, the reformulation of regulated products with water as part of implementing PAR 1168 would also be expected to have sufficient water supplies available from existing entitlements and resources with requiring any new or expanded entitlements.

## **Conclusion**

Based upon these considerations, significant adverse hydrology and water quality impacts are not expected from implementing PAR 1168. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING.</b>				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**X. a)& b) No Impact.** Since compliance with PAR 1168 is expected to be through the reformulation of regulated products to meet VOC content limits, PAR 1168 would not require the construction of any new or modified structures or new development in undeveloped areas. Therefore, implementation of PAR 1168 would not be expected to result in physically dividing an established community.

Further, land use and other planning considerations are determined by local governments and there is no land use agency that would have jurisdiction over PAR 1168. For this reason, PAR 1168 would not require alterations to or conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

**Conclusion**

Based upon these considerations, significant adverse land use and planning impacts are not expected from implementing PAR 1168. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES.</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XI. a) & b) No Impact.** There are no provisions in PAR 1168 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum, which are commonly used for construction activities or industrial processes. Since the proposed project is likely only to result in the reformulation of regulated products and not require new construction, PAR 1168 would have no effects on the use of important minerals, such as those described above. Therefore, no new demand on mineral resources is expected to occur and significant adverse mineral resources impacts from implementing PAR 1168 are not anticipated.

### **Conclusion**

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementing PAR 1168. Since no significant mineral resource impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XII. NOISE.</b> Would the project result in:				
a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC

content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XII. a) No Impact.** PAR 1168 is not expected to alter the manufacturing, distribution, or application of regulated products in any substantial way that would alter existing noise profile at the manufacturing facilities. The manufacture of PAR 1168 compliant regulated products is not expected to require physical modifications that would require additional noise-causing equipment at existing facilities, because it is anticipated that the same equipment used to manufacture and apply currently available regulated products would continue to be used and applied. Further, the use of regulated products at the consumer and institutional level is typically not a noise intensive activity. Therefore, the existing noise levels are unlikely to change and raise ambient noise levels in the vicinities of the existing facilities or other sites where these products are distributed, sold, or used to above a level of significant in response to implementing PAR 1168. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health at distribution and retail locations.

**XII. b) No Impact.** PAR 1168 is not anticipated to expose persons to or generate excessive groundborne vibration or groundborne noise levels since no construction activities are expected to occur from the expected reformulation of regulated products as a result of lowering the VOC content limits in PAR 1168.

**XII. c) No Impact.** No increase in periodic or temporary ambient noise levels in the vicinity of affected facilities above levels existing prior to PAR 1168 is anticipated because the proposed project would not require construction-related activities nor would it change the existing activities currently performed by persons who utilize regulated products. See also the response to Section XII. a).

**XII. d) No Impact.** Implementation of PAR 1168 would not affect existing practices by persons who use and apply PAR 1168 regulated products. Even if affected sites where PAR 1168 compliant regulated products are used are located within two miles of a public airport or private airstrip, no new noise impacts would be expected since the application of regulated products is not typically a noise intensive activity. Thus, PAR 1168 is not expected to expose persons residing or working within two miles of a public airport or private airstrip to excessive noise levels.

## Conclusion

Based upon these considerations, significant adverse noise impacts are not expected from the implementing PAR 1168. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING.</b>				
Would the project:				
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XIII. a) No Impact.** PAR 1168 is not anticipated to generate any significant effects, either direct or indirect, on the population or population distribution within SCAQMD’s jurisdiction as no additional workers are anticipated to be required to comply with PAR 1168. No additional workers

would be required to manufacture PAR 1168-compliant regulated products because the same equipment that is currently used to manufacture regulated products under the current version of Rule 1168 would continue to be used to manufacture reformulated products under PAR 1168. In addition, even though regulated products are expected to be reformulated, the usage amount of the reformulated regulated products would not be expected to substantially change. Thus, no additional workers are expected to be needed to apply the reformulated regulated products. Human population within the jurisdiction of the SCAQMD is expected to grow regardless of implementing PAR 1168. As such, PAR 1168 would not result in changes in population densities or induce significant growth in population.

**XIII. b) No Impact.** PAR 1168 would likely only result in reformulation of regulated products. Aside from altering the chemical components of the regulated products, PAR 1168 is not expected to substantially alter existing operations where the reformulated regulated products may be manufactured or used. Consequently, PAR 1168 is not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of persons or housing elsewhere in the District.

### **Conclusion**

Based upon these considerations, significant adverse population and housing impacts are not expected from implementing PAR 1168. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

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	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XIV. PUBLIC SERVICES.</b> Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new

or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XIV. a) Less Than Significant Impact.** A potential adverse impacts to fire departments could occur if there is an increase the potential for an accidental release of a hazardous or flammable material that is used in reformulating compliant regulated products. Under this circumstance, fire departments would have to respond more frequently to accidental release incidences. Another potential adverse impact to fire departments could occur if there is an increase in the amount of hazardous materials or flammable materials stored at affected facilities, fire departments may have to conduct additional safety inspections. However, in order to comply with PAR 1168, manufacturers are expected to reformulate their regulated products with chemicals that contain less VOCs, less or no toxics, and no stratospheric ozone-depleting compounds. PAR 1168 does not include any provisions that would directly or indirectly dictate the use of any specific regulated product formulations with the exception of prohibiting Group II exempt solvents (except VMS), which are, or are potentially toxic or ozone-depleting compounds. Manufacturers will have the flexibility to choose the product formulation that best suits their needs.

Current regulated products are water-borne (minimal VOC) or use the following VOC-containing solvents, which are flammable, in their formulations: acetone, methyl ethyl ketone (MEK), tetrahydrofuran (THF), PCBTF, xylene, cyclohexane, hexane, heptane, and toluene. If these regulated products are reformulated, some more will likely become water-borne (minimal VOC) or use low-VOC solvents and the existing fire hazard for the manufacturers as well as the end users would be expected to eventually decrease as reformulated products become available.

In 2013, SCAQMD staff contacted the California Fire Marshall's Office and county fire departments to inquire about fire statistics and it turns out that incidences of fires are not indexed with enough detail to determine which fires were caused by coatings, adhesives, sealants, or solvents. Therefore, it could not be determined if the number fire incidents have increased because of the reformulations to lower VOC-containing products for other existing SCAQMD VOC rules (e.g., Rules 1107, 1113 and 1151). As stated by a San Bernardino County Fire employee<sup>17</sup>, only two fires between 2000 and 2013 were determined to be caused by architectural coating operations. In both cases, the fires were from the combustion of cleaning rags (which are subject to Rule 1171 – Solvent Cleaning Operations, and not architectural coating operations (which are subject to Rule 1113). Therefore, based on this sampling of data, fires that can be attributed to regulated products that are reformulated pursuant to the lower VOC content requirements in PAR 1168 would be rare. Thus, fire departments would not be expected to have to respond more frequently to accidental releases of chemicals used by manufacturers in the reformulation process or accidental releases of the reformulated regulated products that are used by consumers.

Therefore, PAR 1168 is not expected to increase the amount of hazardous materials or flammable materials stored at affected facilities, which would require significant additional safety inspections. PAR 1168 is not expected to generate significant adverse impacts to fire departments.

**XIV. b) Less Than Significant Impact.** Local police departments are also first responders to emergency situations such as fires, for example, to cordon off the area and provide crowd control. However, as explained in Section XIV. a), implementing PAR 1168 would not be expected to increase the number of fires compared to the existing setting. As a result, no significant adverse

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<sup>17</sup> Telephone conversation with San Bernardino County Fire Department Public Information Unit on December 6, 2013.

impacts to local police departments would also be expected because no substantial increases in fire emergencies are anticipated.

**XIV. c) & d) No Impact.** As explained in Section XIII. a), PAR 1168 is not anticipated to generate any significant effects, either direct or indirect, on the population or population distribution within SCAQMD's jurisdiction as no additional workers are anticipated to be required to comply with PAR 1168. No additional workers would be required to manufacture PAR 1168-compliant regulated products because the same equipment that is currently used to manufacture regulated products under the current version of Rule 1168 would continue to be used to manufacture reformulated products under PAR 1168. In addition, even though regulated products are expected to be reformulated, the usage amount of the reformulated regulated products would not be expected to substantially change. As such, no additional workers are expected to be needed to apply the reformulated regulated products. Because PAR 1168 is not expected to induce population growth in any way, and because the local labor pool (e.g., workforce) using regulated products would remain the same since PAR 1168 would not trigger changes to current usage practices, no additional schools would need to be constructed as a result of implementing PAR 1168. Therefore, since no increase in local population would be anticipated as a result of implementing PAR 1168, there would be no corresponding impacts to local schools and there would be no corresponding need for new or physically altered public facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Therefore, no impacts would be expected to schools or other public facilities.

### **Conclusion**

Based upon these considerations, significant adverse public services impacts are not expected from implementing PAR 1168. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XV. RECREATION.</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XV. a) & b) No Impact.** As discussed in Section X - Land Use and Planning, there are no provisions in PAR 1168 that would affect land use plans, policies, or regulations. Land use and

other planning considerations are determined by local governments. No land use or planning requirements would be altered by the adoption of PAR 1168, which only affects the VOC content of regulated products. Further, PAR 1168 would not affect population growth or distribution within the SCAQMD's jurisdiction (see Section XIII – Population and Housing), in ways that could increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical effect on the environment because it would not directly or indirectly increase or redistribute population.

**Conclusion**

Based upon these considerations, significant adverse recreation impacts are not expected from implementing PAR 1168. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVI. SOLID AND HAZARDOUS WASTE.</b> Would the project:				
a) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

The proposed project impacts on solid and hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer’s building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XVI. a) & b) No Impact.** In general, the purpose of PAR 1168 is to achieve VOC emission reductions through reformulation of regulated products, which will ultimately improve air quality and reduce adverse human health impacts related to poor air quality. Further, since products are to be reformulated with less hazardous components (e.g., chemicals that contain less VOCs, toxics and stratospheric ozone-depleters) than what is currently available, PAR 1168 may have the added beneficial effect of reducing the amount of unused regulated products that are disposed of as hazardous waste. It is important to note that PAR 1168 also contains a three-year sell-through to allow manufacturers and suppliers to deplete regulated products in the warehouse or on the shelf

and allows users to use up any remaining product rather than disposing of them. The sell-through and use-through effective dates should accommodate the typical three year shelf life of these regulated products. Of course, when there is unused material under the current version of Rule 1168, contractors and businesses using regulated products either dispose of waste material according to the specifications in the manufacturer's product data sheets or recycle the waste material. Under PAR 1168, these disposal practices and the total amount of materials (hazardous and non-hazardous) disposed of would not be expected to change. For these reasons, implementation of PAR 1168 would not be expected to create a new need to dispose of unused materials that do not comply with PAR 1168 upon adoption.

Based upon these considerations, PAR 1168 is not expected to increase the volume of solid or hazardous wastes that cannot be handled by existing municipal or hazardous waste disposal facilities, or require additional waste disposal capacity. Further, implementing PAR 1168 is not expected to interfere with any affected distributors' or retailers' ability to comply with applicable local, state, or federal waste disposal regulations.

**Conclusion**

Based upon these considerations, significant adverse solid and hazardous waste impacts are not expected from implementing PAR 1168. Since no significant solid and hazardous waste impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION AND TRAFFIC.</b>				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Significance Criteria

Impacts on transportation and traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

## Discussion

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XVII. a) & b) No Impact.** In order to comply with PAR 1168, manufacturers are expected to reformulate their regulated products with chemicals that contain less VOCs, less or no toxics, and

no stratospheric ozone-depleting compounds. In order to accomplish this task, the supply of non-compliant chemicals used to make current regulated products will be replaced with PAR 1168 compliant chemicals. Further, the volumes of reformulated regulated products that are produced by manufacturers to comply with PAR 1168 will eventually replace the existing supply of regulated products currently available on the market. Thus, the increased amounts of replacement chemicals needed to reformulate products will be offset by a decrease in the amounts of non-compliant chemicals needed such that no increase is expected in the overall volumes of materials to be used in manufacturing or the amount of reformulated products to be made. There are currently manufactured regulated products that are compliant within SCAQMD's jurisdiction that are shipped and transported throughout the country and other compliant products that are manufactured outside the SCAQMD's jurisdiction are trucked in. It would not be expected that the reformulation of regulated products would alter any future deliveries or change in the circulation of regulated products. Thus, the current level of transportation demands related to transporting substitute chemicals or new formulations of materials is also not expected to increase. PAR 1168 is not expected to affect existing uses and applications of regulated products that would change or cause additional worker trips to distribution or retail facilities or increase transportation demands or services. Therefore, with no substantial increase in operational-related trips anticipated, implementing PAR 1168 would not be expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities or other sites that use these products.

**XVII. c) No Impact.** PAR 1168 will result in the reformulation of regulated products by manufacturers substituting VOC-containing chemicals with other replacements that contain less VOCs, toxics and stratospheric ozone-depleters. Since product reformulation would not require the installation of new or the modification of existing manufacturing equipment, air pollution control equipment or any structures at a height that would interfere with an airport, no changes in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks, would be expected to occur as a result of complying with PAR 1168. In addition, PAR 1168 would not affect in any way air traffic in the region, because regulated products are typically shipped via ground transportation and not by air. Therefore, implementation of PAR 1168 is not expected to adversely affect traffic patterns.

**XVII. d) & e) No Impact.** As explained in Section XVII c) above, regulated products are typically shipped via ground transportation (e.g., via roadways) and the shipping of reformulated regulated products made in response to PAR 1168 would also be shipped via ground transportation. As explained in Section XVII a) and b) above, the current level of transportation demands related to transporting substitute chemicals necessary to manufacturer reformulations or the final reformulations themselves is also not expected to increase. Therefore, the existing roadways should be sufficient to handle the transportation needs associated with implementing PAR 1168. Thus, the manufacture and use of compliant regulated products would not require the construction of new or modified structures or roadways. Consequently, implementing the proposed project will not create roadway hazards or incompatible roadway uses or alter the existing long-term circulation patterns. Thus, no long-term impacts on the traffic circulation system are expected to occur during implementation of PAR 1168.

Further, impacts to existing emergency access at the manufacturing facilities would also not be affected because PAR 1168 does not contain any requirements specific to emergency access points and each manufacturer would be expected to continue to maintain their existing emergency access. As a result, PAR 1168 is not expected to adversely impact emergency access.

**XVII. f) No Impact.** No changes to the parking capacity at or in the vicinity of the manufacturing facilities are expected with adopting PAR 1168. Adoption of PAR 1168 would not change existing operations, so no new workers at the manufacturing facilities would be expected. Since implementation of PAR 1168 is not expected to require additional workers, no traffic impacts are expected to occur and consequently, additional parking capacity will not be required. Therefore, PAR 1168 is not expected to adversely impact on- or off-site parking capacity. PAR 1168 has no provisions that would conflict with alternative transportation, such as bus turnouts, bicycle racks, etcetera.

### **Conclusion**

Based upon these considerations, significant adverse transportation and traffic impacts are not expected from implementing PAR 1168. Since no significant transportation and traffic impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

PAR 1168 will reduce VOC, toxic air contaminant emissions, and stratospheric ozone-depleting compounds from regulated products by lowering VOC content limits of certain categories of adhesives and sealants. PAR 1168 affects any person who uses, sells, stores, supplies, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers but includes certain exceptions. For some products, compliance is expected to occur through the reformulation of the regulated product, which may potentially create secondary adverse environmental impacts. Currently, many products are solvent-based. Based on past coatings rules requiring reformulation, manufacturers will likely reformulate their products with water-borne technology or replace conventional solvents with VOC exempt solvents to meet the lower VOC content limits. During reformulation, manufacturers will need to ensure products do not contain any SCAQMD Rule 102 Group II exempt compounds as replacements for any solvent greater than 0.1 percent by weight. Thus manufacturers will replace conventional solvents with less or non-toxic solvents. Further, PAR 1168 will also contain a requirement that would prevent

manufacturers from reformulating regulated products with stratospheric ozone-depleting compounds. Any changes to the manufacturing process would occur inside each affected existing manufacturer's building(s). Since, VOC emissions will be reduced through reformulation, no new or additional construction of air pollution control equipment is expected based on the implementation of PAR 1168.

**XVIII. a) No Impact.** As explained in Section IV - Biological Resources, PAR 1168 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because the proposed project would not require any new construction and/or operational activities that differ from existing settings. The regulated products can be used at existing settings and have been already greatly disturbed and as such, would not typically support any species of concern or the habitat on which they rely. For these reasons, PAR 1168 is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

**XVIII. b) Less Than Significant Impact.** Based on the foregoing analyses, PAR 1168 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts from implementing PAR 1168 would not be "cumulatively considerable" as defined by CEQA Guidelines Section 15064(h)(1) for any environmental topic because there are no, or only minor incremental project-specific impacts that were concluded to be less than significant. Per CEQA Guidelines Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulative considerable. SCAQMD cumulative significant thresholds are the same as project-specific significance thresholds.

Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by PAR 1168 for any environmental topic.

**XVIII. c) Less Than Significant Impact.** Based on the foregoing analyses, PAR 1168 is not expected to cause adverse effects on human beings for any environmental topic, either directly or indirectly because: 1) the air quality and GHG impacts were determined to be less than the significance thresholds as analyzed in Section III – Air Quality and Greenhouse Gases; 2) the hazards and hazardous materials impacts were determined to be less than significant as analyzed in Section VIII – Hazards and Hazardous Materials; 3) the increased water usage and wastewater was determined to be less than significant as analyzed in Section IX – Hydrology and Water Quality; 4) public services such as fire protection and police protection were determined to be less than the significance thresholds as analyzed in Section XIV – Public Services. In addition, the analysis concluded that there would be no significant environmental impacts for the remaining environmental impact topic areas: aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, land use and planning, mineral resources, noise, population and housing, recreation, solid and hazardous waste, and transportation and traffic.

## **Conclusion**

As previously discussed in environmental topics I through XVIII, the proposed project has no potential to cause significant adverse environmental effects. Since no mitigation measures are necessary or required.

## **APPENDICES**

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**Appendix A: Proposed Rule 1168 – Adhesive and Sealant Applications**

**Appendix B: Comment Letters Received on the Draft EA and Responses to Comments**

## **APPENDIX A**

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### **PROPOSED AMENDED RULE 1168 – ADHESIVE AND SEALANT APPLICATIONS**

In order to save space and avoid repetition, please refer to the latest version of Proposed Amended Rule 1168 located elsewhere in the Governing Board Package. The version of Proposed Amended Rule 1168 that was circulated with the Draft EA and released on July 21, 2017 for a 30-day public review and comment period ending on September 15, 2017 was identified as “Proposed Amended Rule 1168 (Version 8) - July 21, 2017”.

Original hard copies of the Draft EA, which include the draft version of the proposed amended rule listed above, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by contacting Fabian Wesson, Public Advisor at the SCAQMD’s Public Information Center by phone at (909) 396-2039 or by email at [PICrequests@aqmd.gov](mailto:PICrequests@aqmd.gov).

## **APPENDIX B**

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### **Comment Letters Received on the Draft EA and Responses to Comments**

**Comment Letter #1: Rita M. Loof / RadTech International**

**Comment Letter #2: Severin Martinez for Dianna Watson / California  
Department of Transportation (Caltrans)**

## Comment Letter #1



August 31, 2017

Mr. Michael Krause  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, California 91765

Re: Public comments to Proposed Amended Rule 1168—Adhesives

Dear Mike:

RadTech International hereby reiterates the comments we have made in writing and during the public consultation process on proposed amended rule (PAR) 1168. We were thankful that staff expressed a willingness to make changes to the proposal presented at the most recent public consultation meeting. However, we are disheartened that staff's position regarding our two main issues (1) Inclusion of test method for enforcement purposes and (2) Exemption from the overly prescriptive recordkeeping requirements, remains unchanged.

### Inclusion of Test Methods for UV/EB/LED

RadTech commends the district for including a definition for energy curable materials in Section (b)(28) of the proposed rule and providing clarification regarding test methodology. However, we cannot support the concept of creating two different mechanisms (one for "information-only" and one for enforcement) to test materials. RadTech urges the inclusion of ASTM D7767-11 in both the Definition and the Test Method section of the rule. ASTM D7767-11 is the best tool available today to measure VOC emissions from UV/EB thin film materials. We had previously reached consensus with the district regarding the inapplicability of Method 24 and SCAQMD Method 313 to UV/EB materials. Thus, we would suggest that an additional sub-section (K) be added to Section (e)(1) to read as follows:

*(K) The VOC content of Energy Curable Adhesives and Sealants shall be determined by ASTM Test Method D7767-11- Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them.*

Additionally, the rule includes a method for "thick film" adhesives which is not applicable to UV/EB/LED materials. The following language would ensure clarity:

*(L) The VOC content of Non-Thin Film Energy Curable Adhesives and Sealants shall be determined by ASTM Test Method D5403-93- Standard Test Methods for Volatile Content of Radiation Curable Materials.*

**Comment Letter #1 (cont.)**

Staff has stated that the ASTM method is not a “direct” method but, the GCMS alternative is also an indirect method. It does not allow VOC’s from a cured coating to be measured at the end use location and using the end use cure conditions (which includes backing, geometry, source, line speed, environment (air or nitrogen), etc.). The GCMS method has a level of uncertainty in the correlation to real emissions in use. As per a request from district staff in 2013, we have provided you with a procedure to calculate VOC’s from a fully formulated product using ASTM D7767-11.

Exemption from Reporting & Recordkeeping

We urge the district to provide incentives to companies who reduce their emissions by exempting UV/EB/LED materials that exceed the rule requirements. We are supportive of the concept of reducing recordkeeping burdens for those materials and believe those operations should not be subjected to the same labeling and recordkeeping requirements as their higher emitting counterparts. We request that UV/EB/LED materials containing 50 grams per liter of VOC or less, be exempted from the Administrative Requirements in Section (f)(1) and the Reporting Requirements in Section (f)(2) of PAR 1168. In 2021, the lowest limit in the rule will be 20 grams per liter and as such, we would be open to lowering the limit to 20 grams per liter in 2021 to ensure consistency. We are especially concerned with the consequences of this proposal on the medical device industry as it may hamper the manufacture of life saving medical products.

1-1

We have seen how overly prescriptive regulations have had the unintended consequences of driving business out of the basin. As a result, emissions from goods movement have increased as products are manufactured elsewhere and either shipped in or trucked into the basin. Thus, there is a correlation between the exodus of manufacturing from the Basin and emissions associated with goods movement. We ask that you analyze the emissions impact of goods movement as part of the CEQA process in the rule.

Guidance Document

We were recently informed that staff intends to provide additional clarifications on rule language interpretation, after rule adoption via a “Guidance Document”. Although well intentioned, we are not supportive of this concept because there is no assurance that the Board will be involved. For lack of a better term, this would amount to “underground” rulemaking. If a rule needs a guidance document to interpret it after the board has adopted it, the rule itself is not sufficiently clear and thus does not meet the requirements for Clarity in the Health and Safety Code.

We appreciate your attention to these issues and look forward to a productive rulemaking effort.

Sincerely

Rita M. Loof  
Director, Environmental Affairs

Cc: Wayne Nastri, Nicole Silva, Heather Farr, Barbara Radlein

## **Response to Comment Letter #1: - RadTech International**

Comment Letter #1 primarily consists of comments pertaining to the proposed rule language in PAR 1168, except for the bracketed language as shown above relating to CEQA. Responses to the remainder of the comment letter directly related to proposed rule language in PAR 1168 can be found in the staff report under the section Comments and Responses, Comment Letter No. 7.

### **Response 1-1**

Manufacturers of products subject to Rule 1168 exist within SCAQMD's jurisdiction, outside of SCAQMD's jurisdiction but within California, and outside of California, and there are no provisions in PAR 1168 that would require these manufacturers to relocate. While manufacturers outside of SCAQMD's jurisdiction are not subject to SCAQMD's Rules and Regulations per se, the products they manufacture and ship into SCAQMD's jurisdiction for distribution and sale, are subject to the requirements, including recordkeeping and reporting, in current Rule 1168 and these products will continue to be subject to PAR 1168. For these reasons, the reporting and recordkeeping requirements affect manufacturers of regulated products nationwide and not just within the SCAQMD's jurisdiction. Manufacturers that are subject to the current version of Rule 1168 already keep records that contain purchasing and sales data, for example, and submit periodic reports to SCAQMD. Further, the additional recordkeeping and reporting requirements contained in PAR 1168 would not change how the goods are currently moved into the Basin, for those products that are already manufactured outside of the Basin. Goods manufactured elsewhere, including those manufactured in other countries, would continue to be required to report sales data if they manufacture regulated products that are delivered and distributed or sold within the SCAQMD's jurisdiction. While PAR 1168 proposes to change the VOC limits of certain products which will cause products to be reformulated, the shipment of the reformulated products will replace the previous products that are currently shipped. Thus, no changes to shipping methods and routes would be expected to change as a result of product reformulation.

Finally, SCAQMD staff has not received any comments from affected manufacturers located within SCAQMD's jurisdiction indicating that they would relocate in response to the recordkeeping and reporting requirements contained in PAR 1168. Conversely, SCAQMD staff has also not received any comments from affected manufacturers located outside SCAQMD's jurisdiction that PAR 1168 would cause them to relocate their facilities to within SCAQMD's jurisdiction.

For these reasons, the emissions from goods movement of products reformulated in accordance with PAR 1168 would not be expected to change from the existing setting and no further analysis is warranted under CEQA.

## Comment Letter #2

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

**DEPARTMENT OF TRANSPORTATION**  
DISTRICT 7-OFFICE OF REGIONAL PLANNING  
100 S. MAIN STREET, MS 16  
LOS ANGELES, CA 90012  
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*Making Conservation  
a California Way of Life.*

September 12, 2017

Ms. Barbara Radlein  
South Coast AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: Proposed Amended Rule 1168 –  
Adhesive and Sealant Application  
Vic: Various PM: Various  
GTS# 07-ALL-2017-00033  
SCH# 2017081031

Dear Ms. Radlein,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project would further reduce emissions of volatile organic compounds (VOCs), toxic air contaminants, and stratospheric ozone-depleting compounds from adhesives, adhesive primers, sealants and sealant primers.

Upon reviewing the Draft Environmental Assessment, Caltrans has the following comments:

We do not expect project approval to result in direct adverse impacts to existing State transportation facilities.

If you have any questions or concerns regarding these comments, please contact project coordinator, Severin Martinez at (213) 897-0067 or [severin.martinez@dot.ca.gov](mailto:severin.martinez@dot.ca.gov) and refer to GTS# 07-ALL-2017-00033.

Sincerely,

DIANNA WATSON *for*  
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

**Response to Comment Letter #2: - Department of Transportation (Caltrans)**

Thank you for your comment. No further response is required under CEQA.