

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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## **Draft Staff Report**

### **Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II**

### **Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II**

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**EXECUTIVE SUMMARY**

Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II is an administrative rule that provides equipment, processes, and operations that emit small amounts of air contaminants an exemption from South Coast AQMD permitting requirements under Regulation II - Permits, unless those equipment, processes, and operations are excluded from exemption pursuant to subdivision (s) – Exceptions. The 2018 amendment to Rule 219 was submitted to U.S. EPA for approval into the State Implementation Plan (SIP). In 2021, U.S. EPA provided an initial review of Rule 219 and identified potential deficiencies that may prevent SIP approval. Proposed Amended Rule 219 (PAR 219) addresses comments raised by the U.S. EPA as well as the Governing Board’s direction to encourage the usage of low-emission technologies. PAR 219 also seeks to include additional exemptions for equipment categories with small potential for criteria pollutant emissions and low toxic emission profiles and limited potential for further reductions from permitting requirements. Additionally, PAR 219 includes revisions to structure of the current rule to match the format of other rules, as well as clarifications and editorial corrections.

Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II provides an alternative to South Coast AQMD permits by allowing specific emission sources that meet predetermined criteria to register the emission source in the Rule 222 filing program. These sources do not require a written permit but are required to meet the filing requirements pursuant to the Rule 222 filing program and are subject to operating conditions. Proposed Amended Rule 222 (PAR 222) will align the rule with the changes in PAR 219. PAR 222 also includes other minor revisions to streamline recordkeeping requirements and to improve rule clarity.

## **CHAPTER 1 – BACKGROUND**

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**INTRODUCTION**

**REGULATORY HISTORY**

**NEED FOR PROPOSED AMENDMENTS**

**AFFECTED INDUSTRIES**

**PUBLIC PROCESS**

## INTRODUCTION

South Coast AQMD’s permitting program (Regulation II – Permits) implements requirements of the federal and state Clean Air Act (CAA), the Air Quality Management Plan (AQMP), and air quality rules and regulations by specifying operating and compliance requirements for stationary sources that emit air contaminants. Air contaminants are generally categorized into criteria pollutants and toxic air contaminants. The six criteria pollutants are ozone, particulate matter (PM), carbon monoxide, lead, nitrogen dioxide, and sulfur dioxide. A toxic air contaminant (TAC) is “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.”<sup>1</sup>

If a permit is deemed necessary, the owner or operator of the equipment, process, or operation is required to submit an application, including the necessary information to calculate potential emissions. The owner or operator must pay an application fee to account for costs of the permit evaluation process and an annual permit renewal fee.<sup>2</sup> Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II is an administrative rule that provides equipment, processes, and operations that emit small amounts of air contaminants an exemption from South Coast AQMD permitting requirements under Regulation II - Permits, unless those equipment, processes, and operations are excluded from exemption pursuant to subdivision (s) - Exceptions. In addition, an exemption from a written permit requirement provided by this rule is only applicable if the owner or operator of the equipment, process, or operation is in compliance with subdivision (t) - Recordkeeping.

Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II provides an alternative to South Coast AQMD permits by allowing specific emission sources that meet predetermined criteria to register the emission source in the Rule 222 filing program. These sources do not require a written permit but are required to meet the filing requirements pursuant to the Rule 222 filing program and are subject to operating conditions. Emission sources eligible for the Rule 222 filing program are estimated to have lower emissions. The information collected via the filing program can be used for emissions inventory development, as well as to aid in future rulemaking activities and nuisance investigations. Processing a Rule 222 filing is typically faster and less costly than a traditional South Coast AQMD permit.

## REGULATORY HISTORY

Rule 219 was adopted on January 9, 1976, and has subsequently been amended 21 times; this proposed amendment will be the twenty-second amendment to the rule. The most recent amendment was on January 7, 2022, to exempt small mobile fuelers.

Rule 222 was adopted on September 11, 1998 and has subsequently been amended five times; this proposed amendment will be the sixth amendment to the rule. The most recent amendment was on May 5, 2017, to add several equipment categories to the Rule 222 filing program.

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<sup>1</sup> Health and Safety Code Section 36955

<sup>2</sup> South Coast AQMD Rule 301 - Permitting and Associated Fees

## NEED FOR PROPOSED AMENDMENTS

### *Proposed Amended Rule 219*

Proposed Amended Rule 219 (PAR 219) will address: 1) comments made by U.S. EPA; 2) the Governing Board’s direction to encourage the usage of low-emission technologies; 3) rule ambiguities and improve clarity; and 4) requests from stakeholders. A description of each is summarized in the following sections.

#### *U.S. EPA Comments*

A State Implementation Plan (SIP) is a collection of regulations and documents used by a state, territory, or local air district to implement, maintain, and enforce the federal air quality standards and to fulfill other requirements of the federal CAA. South Coast AQMD is required to submit its rules and regulations relevant to controlling the six criteria air pollutants (carbon monoxide, lead, nitrogen oxides, ozone, particulate matter, and sulfur dioxide) to U.S. EPA for SIP approval.

The version of Rule 219 that was last reviewed by U.S. EPA and approved into the SIP is dated September 4, 1981. In 2021, U.S. EPA provided an initial review of Rule 219 and found several potential deficiencies that would prevent the rule from being approved into the SIP. U.S. EPA has also proposed a series of recommendations to improve enforceability and clarity. An expanded discussion of U.S. EPA comments is provided in Chapter 2. PAR 219 will address the issues raised by U.S. EPA.

#### *Promote the Use of Low-Emission Technologies*

During public hearings and committee meetings, stakeholders have commented that ultraviolet (UV), electron beam (EB), and UV light emitting diodes (LED) technology can are a low-emission technology. Staff agrees that materials manufactured for UV/EB/LED curing can potentially be formulated to reduce or eliminate the presence of volatile organic compounds (VOCs). As a result, the South Coast AQMD Governing Board has directed staff to evaluate Rule 219 to encourage the adoption and proliferation of low-emission technologies.

#### *Rule Ambiguities and Improve Clarity*

Staff has identified ambiguities in the existing rule language that may, at times, complicate the implementation of Rule 219. Staff is proposing to address these ambiguities by refining existing exemption provisions, as well as adding new provisions to subdivision (e) – Exceptions. In addition, the structure of Rule 219 is not consistent with the other recently adopted South Coast AQMD rules. For example, test methods are referenced throughout the rule and definitions are currently included within an individual equipment category. PAR 219 restructures the existing rule by establishing separate subdivisions for applicability, definitions and test methods to be consistent with other recently adopted South Coast AQMD rules. This restructuring is intended to improve rule clarity and does not change rule requirements.

#### *Stakeholder Requests*

Throughout the rule development process, staff has received stakeholder requests to consider revisions to Rule 219 permit exemption provisions. Staff has held four working group meetings, as well as multiple individual meetings with stakeholders, to address these requests, however not



all of them could be accommodated in PAR 219. A discussion of the stakeholder requests is included in Chapter 2.

#### *Proposed Amended Rule 222*

Proposed Amended Rule 222 (PAR 222) will be updated to align with the changes contained in PAR 219. PAR 222 also includes minor rule language revisions such as the streamlining of recordkeeping requirements, and the establishment of a rule exemptions provision to improve rule clarity. Specific revisions to PAR 222 are described in Chapter 3.

## **AFFECTED INDUSTRIES**

### *PAR 219*

Rule 219 affects any industry that uses equipment, processes, or operations that produce small amounts of air contaminants by providing an exemption to a written permit for such equipment. These equipment, processes, or operations can be at small business operations or large source operations. The equipment categories in Rule 219 are:

- Mobile Equipment
- Combustion and Heat Transfer Equipment
- Structures and Equipment – General
- Utility Equipment – General
- Glass, Ceramic, Metallurgical Processing and Fabrication Equipment
- Abrasive Blasting Equipment
- Mechanical Equipment
- Printing and Reproduction Equipment
- Pharmaceuticals, Cosmetics and Food Processing and Preparation Equipment
- Plastics, Composite and Rubber Processing Equipment
- Mixing, Blending and Packaging Equipment
- Coating and Adhesive Process/Equipment
- Storage and Transfer Equipment
- Natural Gas and Crude Oil Production Equipment
- Cleaning
- Miscellaneous Process Equipment
- Agricultural Sources
- Registered Equipment

### *PAR 222*

Rule 222 applies to owners and operators of emission sources that meet specific criteria to qualify for the South Coast AQMD Rule 222 filing program, as an alternative to written permits. The rule requires owners and operators of specified emission sources to submit information regarding the source, including but not limited to a description of the source, data necessary to estimate emissions from the source, and information to determine whether the equipment is operating in compliance with applicable South Coast AQMD, state, and federal rules and regulations. The

emission sources currently required to submit a registration under the Rule 222 filing program are identified in Table I of Rule 222.

## **PUBLIC PROCESS**

The development of PAR 219 and PAR 222 has been conducted through a public process. A Working Group for PAR 219 and PAR 222 was formed to allow the public and stakeholders to discuss details of the proposed amendments and provide South Coast AQMD staff with input during the rule development process. The Working Group includes business representatives, environmental and community groups, public agencies, and consultants. South Coast AQMD held four Working Group Meetings via Zoom videoconference and teleconference due to COVID-19. The meetings held via Zoom were on March 31, 2022, June 1, 2022, August 3, 2022 and September 22, 2022. A Public Workshop was held on January 4, 2023, via Zoom to present preliminary draft rule language for PAR 219 and PAR 222 and to receive public comment. The South Coast AQMD Stationary Source Committee received a PARs 219/222 briefing at a public meeting on January 20, 2023.

## **CHAPTER 2 – SUMMARY OF PROPOSED AMENDED RULE 219**

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**OVERVIEW**

**U.S. EPA COMMENTS**

**GOVERNING BOARD DIRECTION TO ENCOURAGE LOW EMISSION  
TECHNOLOGIES**

**RULE AMBIGUITIES AND IMPROVE CLARITY**

**STAKEHOLDER REQUESTS**

**NON-ADMINISTRATIVE AMENDMENTS**

## OVERVIEW

PAR 219 includes revisions to address multiple issues, which can be separated into the following categories:

- U.S. EPA comments
- Governing Board direction to encourage the usage of low-emission technologies
- Rule ambiguities and improve clarity
- Stakeholder requests

The following sections will summarize the issues in each of the categories. Detailed discussions of the specific rule language changes are included under Chapter 2 – Non-Administrative Amendments.

### U.S. EPA COMMENTS

The 2018 amendment to Rule 219 was submitted to U.S. EPA for SIP approval. In 2021, U.S. EPA provided an initial review of Rule 219 and identified potential deficiencies that may prevent SIP approval. Accordingly, staff has proposed changes that are incorporated into PAR 219 to address U.S. EPA's comments. A discussion of the U.S. EPA comments and a summary of the proposed changes are provided below.

#### *Inadequate Recordkeeping Requirements*

Rule 219 contains exemption provisions that are based on equipment, size, material, operating, or emission limitations. U.S. EPA commented that the current recordkeeping provisions in Rule 219 only referred to VOC recordkeeping requirements in Rule 109 – Recordkeeping for Volatile Organic Compound Emissions, and that consistent recordkeeping is necessary for all sources. To respond to U.S. EPA comments, PAR 219 clarifies that recordkeeping provisions are inclusive of all applicable emission sources. U.S. EPA also pointed out two compliance options specific to the Printing and Reproduction Equipment and Coating and Adhesive Process/Equipment provisions where the absence of continuous recordkeeping requirements may be a potential deficiency. In lieu of continuous recordkeeping, a facility using these compliance options may submit a verification that VOC emissions are less than one ton per year, and that all associated VOC-containing solvents (excluding clean up solvents) used in the equipment must contain 50 grams or less of VOC per liter of material and all clean up solvents used in this equipment must contain 25 grams or less of VOC per liter of material. These compliance options have been removed from PAR 219.

#### *Removal of Rule 222 Requirements in Rule 219*

Several permit exemption provisions in Rule 219 require that the equipment complies with Rule 222 filing program (also referred to as a registration) in order to qualify for the exemption. U.S. EPA commented that the requirement is not necessary as registration is not the basis for determining if specific equipment should be exempted from permit requirements. U.S. EPA further commented that removing the registration requirement from Rule 219 also removes the need to submit Rule 222 for SIP approval, thus allowing the filing program to remain a local program,

giving South Coast AQMD the flexibility to revise it as necessary without the SIP approval process.

Staff agrees with U.S. EPA’s assessment and is proposing to remove provisions where a Rule 219 exemption is conditional on submittal of a Rule 222 registration. Staff is also proposing to add language to PAR 219 that indicates where Rule 222 requirements may still apply to clarify to the regulated community that removal of references to Rule 222 in Rule 219 do not change existing Rule 222 registration requirements.

#### *Equipment Replacements at Federal Major Sources*

Paragraph (c)(3) in Rule 219 exempts permitting for identical replacement in whole or in part of any equipment that has been issued a permit, with the exception of seals for external or internal floating roof storage tanks. U.S. EPA commented that equipment replacements at federal major sources cannot be exempted from permit requirements solely on the basis of being identical and must meet the standards for “routine maintenance, repair, and replacement” (RMRR) pursuant to U.S. EPA’s New Source Review (NSR) regulations. Staff is proposing to add a new exemption in PAR 219 to clarify that the exemption at federal major sources must be based on U.S. EPA guidance in determining RMRR.

#### *Other Edits for Clarity, Consistency, and Enforceability*

Rule 219 has been amended multiple times since the 1981 amendment, the last SIP-approved version of the rule. U.S. EPA made proposed edits throughout the rule to improve clarity, consistency, and enforceability. Staff reviewed the edits for accuracy and necessity and has included them in PAR 219. These include removing provisions with effective dates that have passed. U.S. EPA provided other comments and suggestions to improve implementation of PAR 219. Edits made to PAR 219 to address these comments and suggestions include amending the exemption provision for remote reservoir cleaners and adding examples of recordkeeping documents that may be needed to demonstrate the applicability of threshold limits.

#### *Federal Clean Air Act Section 110(l) Analysis*

In addition to the comments above, U.S. EPA is requiring South Coast AQMD to conduct an analysis of Rule 219 as required by federal CAA Section 110(l) (42 U.S.C. 7410(l)) to demonstrate that changes made to a SIP-approved rule do not interfere with any federal CAA requirements concerning attainment. This analysis was conducted as a part of the rule development process and is included in Appendix A.

### **GOVERNING BOARD DIRECTION TO ENCOURAGE LOW EMISSION TECHNOLOGIES**

PAR 219 contains new provisions that address both the Governing Board’s direction and stakeholders’ requests to exempt low emissions UV/EB/LED curing technology. These provisions allow the addition of UV/EB/LED and other low emissions curing technologies to already permitted graphic arts and coating equipment or operations without the need to apply for a permit modification when certain criteria are met.

## **RULE AMBIGUITIES AND IMPROVE CLARITY**

To address ambiguities in the existing rule language, PAR 219 contains updates to the following provisions to improve clarity.

- The exemption provision for small abrasive blasting cabinets and associated dust filters has been updated to specify a minimum control efficiency of 90% for the dust filters.
- New provisions have also been added to the Exceptions provisions, in subdivision (e). These provisions address instances where:
  - Otherwise permit-exempt equipment is operated or modified in a manner that is inconsistent with the applicable exemption provision or leads to preventable excess emissions; and
  - More information is needed for equipment that might qualify for a permit exemption but a health risk assessment is needed to ensure that the health risks do not preclude the use of the exemption under existing Rule 219 provisions.
- Edits have been made to improve rule language clarity that were identified by U.S. EPA as follows:
  - Inconsistent use of common phrases;
  - Inconsistent use of adjectives for capacity thresholds;
  - Lack of effective dates when citing external regulations; and
  - The need for other minor edits.
- PAR 219 has been reformatted to be consistent with other recently adopted or amended South Coast AQMD rules. These reformatting revisions include:
  - 1) Adding an Applicability subdivision and adding a label to identify the “Purpose” text
  - 2) Grouping each exempt equipment category into subdivision (d)
  - 3) Consolidating existing test method requirements located throughout the rule into one standalone subdivision

These reformatting changes represent clarifications and do not change existing provisions for facilities. Table 2-1 provides an overview of the reformatted structure of PAR 219.

**Table 2-1: Overview of PAR 219 Structure**

(a)	Purpose
(b)	Applicability
(c)	Definitions
(d)	Equipment, Processes, or Operations Not Requiring a Written Permit
(1)	Mobile Equipment

- (2) Combustion and Heat Transfer Equipment
  - (3) Structures and Equipment – General
  - (4) Utility Equipment – General
  - (5) Glass, Ceramic, Metallurgical Processing and Fabrication Equipment
  - (6) Abrasive Blasting Equipment
  - (7) Mechanical Equipment
  - (8) Printing and Reproduction Equipment
  - (9) Pharmaceuticals, Cosmetics and Food Processing and Preparation Equipment
  - (10) Plastics, Composite and Rubber Processing Equipment
  - (11) Mixing, Blending and Packaging Equipment
  - (12) Coating and Adhesive Process/Equipment
  - (13) Storage and Transfer Equipment
  - (14) Natural Gas and Crude Oil Production Equipment
  - (15) Cleaning
  - (16) Miscellaneous Process Equipment
  - (17) Agricultural Sources
  - (18) Registered Equipment
- (e) Exceptions
- (f) Recordkeeping
- (g) Test Methods
- (h) Compliance Dates

## **STAKEHOLDER REQUESTS**

During the rule development process, staff received several requests from stakeholders to consider incorporating new exemption provisions in PAR 219. Staff met with all stakeholders to discuss the requests. A summary of these requests is presented in Table 2-2 below, along with a brief discussion and current disposition of the requested change.

**Table 2-2: Stakeholder Requests to Consider in PAR 219 and PAR 222**

<b>Equipment or Process</b>	<b>Proposal</b>	<b>Analysis</b>	<b>Disposition of Request</b>
Gas-Insulated Equipment Used in Electrical Power Generation, Transmission and Distribution Operations	Add an exemption for gas-insulated equipment (GIE) using VOC-containing gases.	Following discussions with GIE stakeholders and vendors, and analysis of estimated equipment size and leak rates, staff agrees that the emissions from each GIE is small as GIE are kept sealed, and VOC is a small fraction of the gas mixture, typically ranging from three to thirteen percent. <sup>3</sup> See Non-Administrative Amendments section for more detailed discussion.	Incorporated proposal. Added subparagraph (d)(4)(M) in PAR 219.
Hydrochloric Acid Storage Tanks	Add an exemption for hydrochloric acid storage tanks.	Hydrochloric acid storage tanks are used to maintain the water quality at pools and other recreational water features. Hydrochloric acid is listed as a TAC in Rule 1401 and without throughput limits in place, the usage of hydrochloric acid may exceed the health risk threshold in Rule 1401 which are location specific based on modeling that considers parameters such as receptor distances and local meteorological data and are typically established in a permit to operate.	Did not incorporate proposal.
Aqueous Ammonia Storage Tanks	Expand PAR 219 (d)(13)(C)(iii) to exempt storage and/or transfer equipment of 500 pounds or less of aqueous ammonia.	Ammonia, as a regulated substance subject to the California Accidental Release Prevention (CalARP) Program, is subject to a 500-pound facility-wide threshold quantity for accidental release prevention. <sup>4</sup> In the event a facility proposes to increase the amount of ammonia to be stored on-site to greater than 500 pounds, a CEQA analysis is required to determine if there is a potentially significant impact to the environmental topic of hazards and hazardous materials. As such, the request is not incorporated.	Did not incorporate proposal.

<sup>3</sup> Meeting with GIE stakeholders and vendors, October 28, 2022.

<sup>4</sup> California Code of Regulations (CCR), Title 19, Division 2, Chapter 4.5, Article 8, Section 2770.5.



Equipment or Process	Proposal	Analysis	Disposition of Request
Sulfuric Acid and Nitric Acid Storage/Transfer Equipment	Remove the maximum 99 percent by weight sulfuric acid concentration threshold in PAR 219 (d)(13)(A)(i) so that the exemption would apply to equipment used exclusively for the storage and transfer of sulfuric acid above 99 percent. For rule consistency, staff should also consider increasing the maximum 70 percent by weight concentration threshold for storage and transfer equipment of nitric acid in clause (d)(13)(A)(ii).	These exemptions have been in the rule since the first iteration (1976) of Rule 219. Sulfuric acid and nitric acid are both TACs, as listed in Rule 1401. Therefore, it is not recommended to remove the maximum percent weight of the acid concentrations.	Did not incorporate proposal.
Filters (e.g., fuel gas, amine, oil) at Refineries	Exempt filters used in refinery equipment from permitting requirements	Filters used in refinery equipment are permitted units that are listed and described in a refinery's facility permit, which includes conditions for replacement. Replacing a filter with an identical unit would not require a permit application, however stakeholders commented that there are instances where filters are no longer manufactured or available and thus cannot be replaced with an identical make and model. Staff's determination is that under these circumstances the appropriateness of the replacement filter must be evaluated. The permitting process would ensure that the potential emissions from this modification are evaluated and applicable emission reduction measures are included.	Did not incorporate proposal.
Knockout Vessels at Refineries	Exempt all knockout vessels used in refinery equipment from permitting requirements.	Condition F25.1 is a universal condition in refinery facility permits and allows certain permitted knockout vessels, as well as other specific equipment, to be excluded from being listed in facility permits. The condition was developed following extensive discussions held between industry representatives and South Coast AQMD staff. The expansion of condition F25.1 is beyond the scope of PAR 219. Knockout vessels are also potential sources of fugitive	Did not incorporate proposal.

Equipment or Process	Proposal	Analysis	Disposition of Request
		VOC emissions and are not recommended to be exempt from permitting requirements.	
Curing Technologies to Permitted Graphic Arts or Coating Operations	Exemptions for permitted graphic arts and coating operations listed in PAR 219 (d)(8)(H) and PAR 219 (d)(12)(L) should not be dependent on the use of low-VOC materials.	New subparagraphs in PAR 219—(d)(8)(H) and (d)(12)(L)—will exempt permitted graphic arts or coating operations from requiring permit modifications when adding curing equipment if the provisions in clauses (d)(8)(H)(i) through (vi) or clauses (d)(12)(L)(i) through (vi), respectively, are met. Clauses (d)(8)(H)(vi) and (d)(12)(L)(vi) require materials associated with the curing technology to be low VOC. Staff believes the low-VOC material requirement should remain in the provisions as it is in line with Governing Board’s directive to encourage deployment of clean technologies beyond emission limits already required by a VOC source-specific rule.	Did not incorporate proposal.
Linear Generators	Exempt linear generators that meet CARB Distributed Generation requirements from permitting requirements.	Linear generators are currently subject to the permitting process that establishes operating conditions to limit emissions. No equipment or models have obtained the CARB certifications to date. There is limited emissions data available to support the request.	Did not incorporate proposal.
Emergency Backup Engines at Telecommunication Facilities	Exempt all emergency backup engines used at telecommunication facilities from permitting requirements.	Rule 219 currently excludes engines 50 horsepower and less from requiring permits. Permits for engines greater than 50 horsepower is a long-standing requirement that applies to all sources including essential services (police, fire, etc.) and to health care facilities.	Did not incorporate proposal.
Food Ovens	Amend Rule 222 recordkeeping provisions for food ovens.	Following discussions with a grocery store and their representatives, a new recordkeeping alternative has been added to Rule 222 for food ovens.	Rule 222, paragraph (d)(1)(G) updated.
Food Ovens at Grocery Stores	Amend Rule 219 and 222 provisions related to “Eating Establishments” to include grocery stores.	Food ovens, including those at grocery stores, are currently exempt from permit requirements conditioned upon Rule 222 registrations. PAR 219 does not change these provisions but for the purposes of Rule 219, eating establishments do not include facilities where food	Partially Incorporated Proposal. Added subparagraph

<b>Equipment or Process</b>	<b>Proposal</b>	<b>Analysis</b>	<b>Disposition of Request</b>
		<p>is prepared and packaged for subsequent sale, such as retail stores. In response to stakeholder requests an exemption was added in Rule 219 for food ovens with no emissions other than emissions from combustion, with a maximum rated heat input capacity of 325,000 Btu/hr. These ovens would not be subject to a Rule 222 filing. The 2022 AQMP calls for over 60% reduction in NOx emissions from stationary sources including food ovens. The registration of food ovens pursuant to existing Rule 222 provisions provides more accurate inventory information to facilitate the rule development process. The existing provisions for eating establishments should not be extended to food (such as bakery) ovens in grocery stores.</p>	<p>(d)(9)(O) in PAR 219.</p>

**NON-ADMINISTRATIVE AMENDMENTS**

Changes have been made throughout PAR 219, most of which are for clarification or consistency, or are grammatical edits. This section will provide background and reasoning for the more substantive amendments to the rule, which are summarized in Table 2-3:

**Table 2-3: Non-Administrative Amendments to PAR 219**

<b>Rule Citation</b>	<b>Description</b>	<b>Category</b>
(a)	Purpose provision	Restructuring
(b)	Applicability provision	Restructuring
(c)	Definitions provision	Restructuring
(d)(2)	Combustion and heat transfer equipment	Rule Ambiguity
(d)(3)(D)	Routine maintenance, repairs, or replacements at federal major source facilities	U.S. EPA Comment
(d)(4)(M)	Electricity transmission and distribution equipment that use a VOC-containing gas as an insulating medium	Stakeholder Request
(d)(6)(B)	Manually operated abrasive blasting cabinets vented to dust filters	Rule Ambiguity
(d)(8)(H) and (d)(12)(L)	Existing permitted graphics arts equipment or operation, and coating equipment or operation, that are adding other low-emitting curing or drying technologies	Governing Board Direction
(d)(9)(O)	Small food ovens where no baking occurs	Stakeholder Request
(d)(15)(A)(iii)	Remote reservoir cleaners	U.S. EPA Comment
(d)(16)(X)	Negative air machines (Asbestos)	Rule Ambiguity
(d)(17)(C)	Updating emissions thresholds for non-Title V agricultural sources	U.S. EPA Comment
(d)(18)(B)(i)	Notification of PERP equipment used in the OCS	U.S. EPA Comment
Multiple provisions	Removal of Rule 222 filing requirements from individual exemption provisions	U.S. EPA Comment
(e)(2)(C)	Exception for equipment not maintained or operated pursuant to exemption provisions or results in preventable excess emissions	Rule Ambiguity

(e)(3)	Requirement to submit permit application when additional information needed to determine health risk	Rule Ambiguity
(f)	Recordkeeping provision	U.S. EPA Comment

*Purpose - subdivision (a)*

To make clear that while Rule 219 may exempt equipment from permitting requirements, registration may still be required pursuant to Rule 222, the Purpose subdivision is proposed to be updated to include language describing that Rule 222 may apply to permit-exempt equipment:

*“Certain equipment, processes, or operations that do not require written permits may be subject to Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II.”*

*Applicability - subdivision (b)*

An Applicability subdivision is proposed to be added to be consistent with recently adopted or amended South Coast AQMD rules:

*“This rule applies to owners or operators of the equipment, processes, or operations listed in subdivision (d).”*

*Definitions - subdivision (c)*

Rule 219 included definitions for provisions related to oil and gas facilities. To match the format in other South Coast AQMD rules, these definitions were consolidated into subdivision (c). To improve rule clarity, subdivision (c) also includes definitions for determining grams of VOC per liter of material and grams of VOC per liter of regulated product, less water and exempt compounds.

*Combustion and Heat Transfer Equipment [paragraph (d)(2)]*

Existing Rule 219 exempts stationary gas turbines including microturbines, with a rated maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power is less than two megawatts and the engines were certified at the time of manufacture with the California Air Resources Board. For the purposes of Rule 219, this certification refers to the California Air Resources Board Distributed Generation Certification Program.

Existing Rule 219 includes a clarifying statement that the permit exemption provisions do not apply when there are emissions other than products of combustion, except for food ovens with a rated maximum heat input capacity of 2,000,000 Btu/hour or less, that are fired exclusively on natural gas and where the process VOC emissions are less than one pound per day. This clarifying statement has been incorporated into PAR 219 clause (d)(2)(C)(iii). It should be noted that the clarifying statement relating to food ovens fueled by natural gas also extends to electric food ovens, or other food ovens that do not have any products of combustion. As described in paragraph (f)(1), it is the responsibility of the owner or operator claiming an exemption under any provision of Rule

219 to maintain documentation and/or calculations sufficient to demonstrate that the stated exemption provision, parameter, requirement, or limitation is applicable. This may involve documentation that the worst case or highest emission potential for any equipment, processes, or operations is below the stated exemption provision, parameter, requirement, or limitation.

*Routine maintenance, repairs, or replacements at federal major source facilities [subparagraph (d)(3)(D)]*

Federal major source<sup>5</sup> facilities are subject to U.S. EPA New Source Review (NSR) requirements, and a major modification<sup>6</sup> conducted at a major source would be subject to permit review.<sup>7</sup> A major modification does not include any activity considered to be RMRR. U.S. EPA determines the applicability of RMRR standards on a case-by-case basis, and has provided a compilation of guidance documents that are available in their NSR Policy Guidance Database.<sup>8</sup>

The current language in Rule 219 subparagraph (d)(3)(C) exempts identical equipment replacements from permitting requirements but does not clearly state that these RMRR standards already apply to federal major source facilities. In response to U.S. EPA's comments that equipment replacements at federal major sources cannot be exempted from permit requirements solely on the basis of being identical and must meet U.S. EPA's NSR regulations' standards for "routine maintenance, repair, and replacement" (RMRR), PAR 219 subparagraph (d)(3)(C) is updated and subparagraph (d)(3)(D) has been added. Staff is proposing to clarify that subparagraph (d)(3)(C) applies only to identical equipment replacements at non-federal major source facilities. Staff is also proposing to add subparagraph (d)(3)(D) to specifically exempt RMRR activities at federal major source facilities.

To determine applicability for this provision, facilities may contact Engineering staff for a written response or could schedule a pre-application meeting. If an in-depth analysis is needed to evaluate whether the exemption applies, a facility may be required to submit a permit application with the necessary information.

The proposed language for subparagraphs (d)(3)(C) and (d)(3)(D) is as follows:

- (C) *“Replacement of identical equipment, as defined in Rule 301 - Permitting and Associated Fees, at a facility that is not a federal major source, as defined in 40 CFR 51.165 or 52.21 as they exist on [Date of Rule Amendment], where a permit to operate had previously been granted for such equipment....”*
- (D) *“Routine maintenance, repair or replacement of a part of any equipment at a facility that is a federal major source, as defined in 40 CFR 51.165 or 52.21 as they exist on [Date of Rule Amendment], where a permit to operate had previously been*

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<sup>5</sup> Under the federal CAA, a federal major source is a stationary source that emits or has the potential to emit any pollutant regulated under the Clean Air Act at a significant emission rate, as defined by 40 CFR 70.

<sup>6</sup> A major modification is defined as “any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase of a regulated NSR pollutant...; and a significant net emissions increase of that pollutant from the major stationary source” - 40 CFR 51.165(a)(1)(v)(A)

<sup>7</sup> 40 CFR 51.165(a)(2)(i)

<sup>8</sup> U.S. EPA's New Source Review Policy and Guidance Document Index. <https://www.epa.gov/nsr/new-source-review-policy-and-guidance-document-index>. Accessed November 9, 2022.

*issued for such equipment, based on U.S. EPA guidance in determining routine maintenance, repair, or replacement.”*

*Electricity transmission and distribution equipment that use a VOC-containing gas as an insulating medium [subparagraph (d)(4)(M)]*

Sulfur hexafluoride (SF<sub>6</sub>) is a potent greenhouse gas (GHG), and is being used by the electric power industry in circuit breakers, gas-insulated substations, and other switchgear in the transmission system to manage the high voltages carried between generation stations and customer load centers. Fugitive emissions of SF<sub>6</sub> can escape from gas insulated substations and switchgear through seals and be released during equipment installation and when equipment is opened for servicing. As part of a program to achieve GHG emissions reductions, CARB amended the Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment (GIE)<sup>9</sup> in 2021. Key provisions of CARB’s regulation include a phase-out schedule for new sulfur hexafluoride gas-insulated equipment. Electric utilities are currently making plans to replace SF<sub>6</sub>-containing GIE. One replacement under consideration includes GIE with alternative gases that contain VOCs. GIE equipment is widely used, and with estimates of more than 40,000 units within the jurisdictional boundaries of South Coast AQMD. Electric utilities have requested consideration to exempt VOC-containing GIE from permitting requirements due to the limited VOC emission potential.

Depending on the size of the equipment, the amount of insulating gas mixture could vary from a few pounds for low voltage units rated less than 17 kV, to 2,000 pounds for high voltage units rated greater than 245 kV. Although GIE are closed systems, fugitive emissions can result from leaks through seals and be released during equipment installation and servicing. Based on information collected from vendors and manufacturers, VOCs are a small fraction of the insulating gas mixture with a typical range of three to 13 percent while the remainder is comprised of oxygen and carbon dioxide. In addition, historical leak rates on this type of equipment were less than one percent per year. CARB’s regulation requires GIE operators to maintain a detailed inventory of gas usage and to report annual emissions to CARB.

Based on the preceding information, the fugitive VOC emissions are estimated to be less than 0.09 pound per year per equipment rated at or less than 245 kV, and less than 0.0001 pound per year per equipment rated at or less than 38kV. This is likely an upper bound estimate as fugitive emissions of the insulating gas mixture consist primarily of carbon dioxide given that the permeation rate for carbon dioxide is higher than that of VOC.<sup>10</sup> Given the potential fugitive emissions from GIE equipment rated at or less than 245 kV are minimal, PAR 219 contains a proposed exemption from permitting requirements as included in subparagraph (d)(4)(M):

*(M) “Gas-insulated equipment with a voltage of 245 kilovolts or less, used in electrical power generation, transmission and distribution operations, that use a VOC-*

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<sup>9</sup> CARB. Electricity Transmission and Distribution Greenhouse Gas Emissions: Current and Past Regulations and Regulatory Documents. <https://ww2.arb.ca.gov/our-work/programs/elec-tandd/regulation>. Accessed on November 9, 2022.

<sup>10</sup> <https://e-cigre.org/publication/871-current-interruption-in-sf6-free-switchgear>

*containing gas as an insulating medium and is manufactured to have a maximum leak rate of less than one percent per year under normal operating conditions.”*

For the purposes of PAR 219, the leak rate specified in subparagraph (d)(4)(M) can be demonstrated through the equipment specification provided by a GIE manufacturer.

*Manually operated abrasive blasting cabinets vented to dust filters [subparagraph (d)(6)(B)]*

Abrasive blasting is the cleaning or preparation of a surface by forcibly propelling a stream of abrasive material, such as sand, steel shot, or walnut shells, against the surface. An abrasive blasting cabinet controls particulate emissions by enclosing the blasting environment and preventing the abrasive material and particulates from the blasted surface from escaping. Dust-filters that vent abrasive blasting cabinets pull the particulate-laden air from the cabinet into a canister, where it is run through a filter before exhausting into the ambient air.

Subparagraph (d)(6)(B) currently exempts small manually operated abrasive blasting cabinets where the internal volume of the blast section is 1.5 cubic meters or less and that are vented to a dust filter. The dust filter itself is also exempt under this provision.

In order to ensure that permit-exempt abrasive blasting cabinets and the associated dust filters are effectively controlling particulates, PAR 219 subparagraph (d)(6)(B) will clarify that the dust filter should have at least a 90 percent overall control efficiency:

- (B) *“Manually operated abrasive blast cabinets, vented to a dust filter with at least 90 percent overall control efficiency (capture and collection) where the total internal volume of the blast section is 1.5 cubic meters (53 cubic feet) or less, and the dust filter exclusively venting such equipment.”*

The dust filter control efficiency can be verified in the manufacturer’s specifications or via the documentation of a test conducted to measure control efficiency. If a facility submits a permit application as a result of this or other PAR 219 amendments that remove exemptions from the rule, submittal of a complete permit application within one year of the effective date of PAR 219 would comply with the compliance date established under paragraph (h)(1).

*Existing permitted graphics arts equipment or operation, and coating equipment or operation, that are adding curing or drying technologies [subparagraphs (d)(8)(H) and (d)(12)(L)]*

New provisions have been added to PAR 219 in response to the Governing Board’s direction to encourage the use of low-emission technologies, as well as in response to stakeholders that requested permit exemptions for UV/EB/LED technologies. While UV/EB/LED curing has been identified as a potentially low-emission technology, these provisions also apply to other curing technologies so long as the requirements are met. The provisions in subparagraphs (d)(8)(H) and (d)(12)(L) contain identical exemption requirements but apply to permitted graphic arts equipment or operations and permitted coating equipment or operations, respectively. The intent of these provisions is to exempt the addition of low-emission curing technologies to permitted graphic arts and coating lines from permit modification requirements under specified conditions. The proposed rule language is in Table 2-4.



To ensure that the exemption applies to low emitting technologies that go above and beyond existing rule requirements, PAR 219 contains criteria that must be met in order for equipment or modifications to be exempt from requirements to obtain permits. The criteria included in subparagraphs (d)(8)(H) and (d)(12)(L) are summarized below.

Clause (i) in subparagraphs (d)(8)(H) and (d)(12)(L) requires that the permitted equipment, excluding the addition of electric curing or drying equipment, remain consistent with the description in the existing permit. If the equipment, other than the added curing or drying equipment, is modified so that it no longer aligns with the permit description, is replaced with non-identical equipment that does not match with the permit description, or if other equipment is added to the permitted operation and is not reflected in the permit, then the provisions of clause (i) would not be satisfied.

**Table 2-4: Proposed Subparagraphs (d)(8)(H) and (d)(12)(L)**

<b>(d)(8)(H) - Graphic Arts Equipment or Operations</b>	<b>(d)(12)(L) - Coating Equipment or Operations</b>
<p><i>“The addition of UV/EB/LED curing technology, or other curing or drying technology, to an existing permitted graphics arts equipment or operation if:</i></p> <p>(i) <i>“The equipment remains consistent with the description in the existing Permit to Operate, excluding the addition of curing or drying equipment operated exclusively using electrical power;</i></p> <p>(ii) <i>“The equipment complies with the conditions specified in the existing Permit to Operate;</i></p> <p>(iii) <i>“There is no physical change to the configuration of the existing air pollution control equipment associated with the equipment or operation;</i></p> <p>(iv) <i>“There is no physical change to the configuration of an existing permanent total enclosure associated with the equipment or operation;</i></p> <p>(v) <i>“All inks, coatings, solvents, or other materials associated with the technology do not contain any toxic air contaminants pursuant to Rule 1401 – New Source Review of Toxic Air Contaminants, as listed on the Safety Data Sheet, except as allowed under the existing Permit to Operate; and</i></p>	<p><i>“The addition of UV/EB/LED curing technology, or other curing or drying technology, to an existing permitted coating equipment or operation if:</i></p> <p>(i) <i>“The equipment remains consistent with the description in the existing Permit to Operate, excluding the addition of curing or drying equipment operated exclusively using electrical power;</i></p> <p>(ii) <i>“The equipment complies with the conditions specified in the existing Permit to Operate;</i></p> <p>(iii) <i>“There is no physical change to the configuration of the existing air pollution control equipment associated with the equipment or operation;</i></p> <p>(iv) <i>“There is no physical change to the configuration of an existing permanent total enclosure associated with the equipment or operation;</i></p> <p>(v) <i>“All coatings, solvents, or other materials associated with the technology do not contain any toxic air contaminants pursuant to Rule 1401, as listed on the Safety Data Sheet, except as allowed under the existing Permit to Operate; and</i></p>

(vi) <i>“All inks, coatings and adhesives, fountain solutions, and VOC containing solvents associated with the technology (excluding cleanup solvents) contain 50 grams or less of VOC per liter of material and all cleanup solvents associated with the technology contain 25 grams or less of VOC per liter of material.”</i>	(vi) <i>“All coatings, solvents, or other materials associated with the technology (excluding cleanup solvents) contain 50 grams or less of VOC per liter of material and all cleanup solvents associated with the technology contain 25 grams or less of VOC per liter of material.”</i>
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Clause (ii) in subparagraphs (d)(8)(H) and (d)(12)(L) requires that permitted equipment still comply with the existing permit conditions. If the addition of the curing or drying equipment results in non-compliance with the existing permit conditions (e.g., the added curing technology increases production capacity and causes an exceedance of a permitted throughput or emission limit), the provisions of clause (ii) of subparagraphs (d)(8)(H) and (d)(12)(L) would not be met.

Clause (iii) of subparagraphs (d)(8)(H) and (d)(12)(L) requires that no physical changes be made to the configuration of existing air pollution control equipment (APCE). Physical changes include adjustments to the APCE operating parameters or adding new ducting to the APCE. Physical changes to APCE would require a permit application submittal so South Coast AQMD engineers can conduct an evaluation to determine if the modifications to the APCE adversely affect its operation and ability to meet applicable rule requirements, and to add permit conditions to ensure compliance, as appropriate. South Coast AQMD evaluates APCEs based on operating specifications that were submitted with the permit application. Therefore, whenever those specifications are proposed to be changed, a permit application is needed for a South Coast AQMD engineering evaluation in order to verify that the APCE’s operation will not be compromised by the physical change and will continue to perform consistently with the information provided in the original permit application. This includes the need for a permit application and engineering evaluation to review the impact of any proposed ducting changes on the performance of the existing APCE. For example, engineering evaluations are necessary to determine if either increased air flows exceed the capacity of the APCE to which they are vented or if existing exhaust fan(s) are appropriately sized to provide adequate air flows throughout the modified ducting system. In summary, applications and engineering evaluations are necessary to ensure that equipment modifications including ducting changes do not result in unintended emissions increases.

Clause (iv) of subparagraphs (d)(8)(H) and (d)(12)(L) requires that no physical changes be made to the configuration of existing permanent total enclosures (PTEs). Physical changes include adjustments operating parameters or changes to existing openings or the additions of openings. As with the requirements in clause (iii) in subparagraphs (d)(8)(H) and (d)(12)(L), physical changes to a PTE may not necessarily conflict with the permit description, however, the changes would still require a permit application submission to conduct an evaluation for South Coast AQMD permitting staff to determine if the PTE’s operation would be compromised.

Clause (v) of subparagraphs (d)(8)(H) and (d)(12)(L) requires all materials associated with the curing or drying technology to not contain any TACs pursuant to South Coast AQMD Rule 1401 – New Source Review of Toxic Air Contaminants (Rule 1401), unless the TACs are already

allowed under the existing permit(s). This includes trace amounts of TACs. This provision serves to ensure that any addition of TACs beyond what is already accounted for in the existing permit(s) be evaluated for health risk potential. Safety data sheets can be used to determine whether TACs are present in the materials.

Clause (vi) in subparagraphs (d)(8)(H) and (d)(12)(L) requires that all materials and cleanup solvents have a low VOC content (50 and 25 g/L of VOC, respectively). This provision is consistent with the Governing Board's direction to encourage the development and deployment of clean technologies.

In regard to clauses (v) and (vi), when considering if all the materials associated with the UV/EB/LED technology contain TACs or VOCs, staff will evaluate the fully formulated materials as applied and not just the component of the ink or coating that is chemically responsible for the UV/EB/LED chemical reaction. For example, a high-VOC coating containing TACs that is reformulated with a photoinitiator to make that coating UV/EB/LED curable would not qualify for the Rule 219 permit exemption. South Coast AQMD regulations apply to the fully formulated coating, not individual ingredients of the inks or coatings. The Rule 219 permit exemption would apply if a high-VOC coating was replaced with a low-VOC UV/EB/LED curing coating, a low-VOC coating was converted to a UV/EB/LED coating, or a new low-VOC UV/EB/LED coating process was added to an existing coating line.

If any of the clauses (i) through (vi) in subparagraphs (d)(8)(H) and (d)(12)(L) are not satisfied, the exemption for adding low-emitting curing technologies to permitted coating or printing equipment does not apply.

*Small Food Ovens Where No Baking Occurs [(d)(9)(O)]*

Subparagraph (d)(9)(O) addresses the applicability of Rule 222 registration requirements for food ovens. Existing Rule 219 includes an exemption from permits for food ovens with a maximum rated heat input capacity of 2,000,000 Btu/hour or less, that are fired exclusively on natural gas and where the process VOC emissions are less than one pound per day provided a Rule 222 registration is submitted. As previously described, PAR 219 removes conditional exemptions that require Rule 222 filings in order to maintain a Rule 219 exemption. Accordingly, food oven registration requirements are included in Rule 222 Table I and reference PAR 219 subparagraph (d)(2)(C). During the rule development process, stakeholders described an oven that is used to heat food but does not involve baking or the formation of process emissions. The stakeholder's concern was that although these ovens are exempted from permits under existing Rule 219 [now included in PAR 219 subparagraph (d)(2)(C)] they could be subject to the filing requirement and the associated recordkeeping requirement under Rule 222. Accordingly, a new Rule 219 exemption was added in subparagraph (d)(9)(O) for food ovens where no baking occurs, and where no process emissions are generated, provided such equipment has a maximum rated heat input capacity of 325,000 Btu/hour. For the purposes of this discussion, baking refers to the baking of foods containing yeast where VOCs are emitted from the process. Rule 222 requires registration for equipment that is exempt from PAR 219 subparagraph (d)(2)(C). Separating out these specific types of ovens where no baking occurs from food ovens identified in (d)(2)(C) will result in a clarification that these ovens with no process emissions are not subject to Rule 222 filing requirements.

*Remote reservoir cleaners [clause (d)(15)(A)(iii)]*

A remote reservoir cleaner is a cleaning device in which liquid solvent is pumped from a solvent container to a sink-like work area and the solvent from the sink-like area drains into an enclosed solvent container while parts are being cleaned. Operators of remote reservoir cleaners must comply with requirements in South Coast AQMD Rule 1171 – Solvent Cleaning Operations, which establishes VOC content limits for cleaning solvents and operational requirements that minimize solvent loss.

The current provision in Rule 219 exempts remote reservoir cleaners. In response to U.S. EPA’s comment that the current exemption would not be approvable without a size limit, PAR 219 clause (d)(15)(A)(iii) is updated. The proposed language in PAR 219 sets the size limit for a permit-exempt remote reservoir cleaner’s sink opening area at a maximum of seven square feet:

- (iii) *“Remote reservoir cleaners with a maximum sink opening area of seven (7) square feet or less, provided the solvent from the sink-like area immediately drains into an enclosed solvent container while the parts are being cleaned.”*

An evaluation of the available equipment for purchase indicates this is inclusive of most remote reservoir cleaners, and staff does not anticipate that the rule language will impact current owners or operators of this equipment.

*Negative Air Machines (Asbestos) [(d)(16)(X)]*

Existing Rule 222 contains a filing requirement for negative air machines used for asbestos removal. PAR 219 includes a clarification that this equipment is exempt from permits.

*Updating Emissions Thresholds for Non-Title V Agricultural Sources [subparagraph (d)(17)(C)]*

Subparagraph (d)(17)(C) of existing Rule 219 exempts agricultural permit units that are at non-Title V agricultural sources where the emissions are below the annual thresholds in Table 1. The values originally included in Table 1 represent half of the Title V emission thresholds. In December 2020, U.S. EPA reclassified the Riverside County Portion of the Salton Sea Air Basin (the Coachella Valley) from a Severe nonattainment area for ozone to an Extreme nonattainment area and this action resulted in changing the major source Title V thresholds for VOC and NO<sub>x</sub>, the precursors to ozone, for the Coachella Valley to be the same as the thresholds applicable to the South Coast Air Basin.<sup>11</sup>

Thus, the VOC and NO<sub>x</sub> thresholds for the Coachella Valley in PAR 219, Table 1 have been lowered in accordance with the redesignation. Additionally, Table 1 has been updated to include thresholds for PM<sub>2.5</sub>. The updates to Table 1 of Rule 219 are presented in Table 2-5.

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<sup>11</sup> South Coast AQMD Rule 3001 – Applicability. Paragraph (b)(2), Table 2 - Potential to Emit Emission Threshold Levels Per Facility Location Accessed on October 25, 2022 from <http://www.aqmd.gov/docs/default-source/rule-book/reg-xxx/rule-3001-applicability.pdf?sfvrsn=>

*Notification of PERP equipment used in the OCS [clause (d)(18)(B)(i)]*

CARB's Statewide Portable Equipment Registration Program (PERP)<sup>12</sup> allows owners or operators of portable engines and other types of equipment to register their units in PERP in order to operate their equipment throughout California without have to obtain individual permits from local air districts. When PERP equipment is used in the Outer Continental Shelf (OCS), Rule 219 currently requires the owner or operator of the equipment to notify South Coast AQMD via submitting a Rule 222 filing.

In response to U.S. EPA's suggestion to remove Rule 222 requirements from PAR 219 clause (d)(18)(B)(i) has been updated. With the removal of all Rule 222 filing requirements from PAR 219, this notification method is replaced with the requirement for the owner or operator of the equipment to notify the Executive Officer. Under current practices, this notification involves sending an email to [perp@aqmd.gov](mailto:perp@aqmd.gov).

**Table 2-5: Updates to Table 1**

**Table 1**  
**(Tons/Year)**

<b>Pollutant (Tons/Year)</b>	<b>South Coast Air Basin</b>	<b>Riverside County Portion of Salton Sea Air Basin</b>	<b>Riverside County Portion of Mojave Desert Air Basin</b>
VOC	5.0	<del>42.5</del> <u>5.0</u>	50.0
NOx	5.0	<del>42.5</del> <u>5.0</u>	50.0
SOx	35.0	35.0	50.0
CO	25.0	50.0	50.0
PM10	35.0	35.0	50.0
<u>PM2.5</u>	<u>35.0</u>	<u>50.0</u>	<u>50.0</u>
Single Hazardous Air Pollutant	5.0	5.0	5.0
Combination Hazardous Air Pollutants	12.5	12.5	12.5

*Removal of Rule 222 filing requirements from individual exemption provisions [Multiple provisions]*

Multiple exemption provisions in Rule 219 require the equipment to be registered with the Rule 222 filing program. In response to U.S. EPA's recommendation to allow Rule 222 registration program to remain as a local program, provisions with conditions based on Rule 222 have been

<sup>12</sup> CARB. <https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp>. Accessed November 3, 2022.

removed from PAR 219. It is proposed to replace the Rule 222 requirement language in each exemption provision with language that states that Rule 222 may be applicable to the equipment: “Rule 222 may be applicable.” The intent of using this language in the specific provisions is to clearly indicate to both the regulated community and South Coast AQMD staff that the equipment exempted in the provisions remain subject to the requirements of Rule 222.

*Exceptions - subdivision (e)*

Subdivision (e) is an existing provision that establishes instances where otherwise exempt equipment, processes, and operations are required to obtain written permits, such as equipment, process materials, and air contaminants that are subject to a State Air Toxic Control Measure, or when a source is not in compliance with Rule 402 – Nuisance or other existing South Coast AQMD rules. Staff has identified the following additional circumstances when a permit is required for otherwise exempt equipment:

***Exception for equipment not maintained or operated pursuant to exemption provisions or results in preventable excess emissions [subparagraph (e)(2)(C)]***

Under the provisions of proposed subparagraph (e)(2)(C), a permit would be required when a facility operates equipment that has been modified, operated, or maintained in a manner inconsistent with the applicable exemption in PAR 219, or results in preventable excess emissions. During the PAR 219 development process, staff received comments that the provisions could be broadly interpreted to include very small amounts of excess emissions. Additional language was added to clause (e)(2)(C)(ii) to specify that the excess emissions would have to be detected or observed by the Executive Officer.

- (C) *“The equipment or the air pollution control system venting the equipment has been modified, operated, or maintained in a manner that:*
  - (i) *“Is inconsistent with the applicable exemption under any provisions of this rule; or*
  - (ii) *“Results in otherwise preventable excess emissions that have been detected or observed by the Executive Officer.”*

***Requirement to submit permit application when additional information is needed to determine health risk [219 paragraph (e)(3)]***

To determine whether an exemption in PAR 219 applies, supporting information such as operating hours and materials used is needed. Health and Safety Code Section 40701(g) allows the Executive Officer to require information necessary to calculate emissions for criteria pollutants, but these provisions do not apply to all situations. PAR 219 paragraph (e)(3) clarifies that in instances where there is inadequate information to evaluate health risk, a requirement to submit a permit application within 60 days of receiving a written notification from the Executive Officer will be triggered.

- (3) *“If the Executive Officer determines the information to evaluate health risk is inadequate, or if additional information or review is required, upon written notification from the Executive Officer, the owner or operator shall, within 60 days of the written notification, submit (a) complete permit application(s) to demonstrate the equipment operates below the risk thresholds in subparagraph (e)(2)(A).”*

Fees for permit applications are determined from the equipment type and the existing Rule 301 fee structure. In instances where there is no equipment- or process specific fee, the fee would be based on Schedule C from Rule 301.

*Recordkeeping [subdivision (f)]*

The current recordkeeping language in Rule 219 refers to the provisions in Rule 109 – Recordkeeping for Volatile Organic Compound Emissions, which regulates recordkeeping for materials containing VOCs. There are no explicit recordkeeping requirements in Rule 219 for exemption provisions with non-VOC emissions. Additionally, the provisions in Rule 109 do not apply to cleaning solvents containing 50 grams of VOC per liter (g/L of VOC) of material or less, or to any material containing 50 g/L of VOC used at facilities that can demonstrate that the total facility VOC emissions do not exceed four tons in any calendar year as shown by annual VOC records. This is deemed inadequate as several exemption provisions are contingent on the use of cleaning solvents that contain 25 g/L of VOC or less and materials containing 50 g/L of VOC or less. In response to U.S. EPA’s comment that the recordkeeping requirements in Rule 219 are inadequate, the provisions in PAR 219 have been updated.

The proposed Recordkeeping provisions provide clarifications to include examples of documents that an owner or operator may need to maintain to demonstrate ongoing exemption applicability. The proposed language also requires that the necessary documents be maintained onsite for three years and be made available upon request. The three-year timeframe is consistent with document retention requirements in other South Coast AQMD rules. The language referring to Rule 109 has been replaced with language that requires, if applicable, documentation of VOC-containing material throughput and emissions and VOC content of each material.

Records must be maintained according to the requirements in subdivision (f) in order to qualify equipment for exemption. The proposed recordkeeping requirements language in subdivision (f) is as follows:

- (1) *“Any owner or operator claiming an exemption under any provision of this rule shall maintain documentation and/or calculations sufficient to demonstrate that the stated exemption provision, parameter, requirement or limitation applies. Documentation may include, as applicable, but not be limited to:*
  - (A) *VOC-containing material throughput and emissions;*
  - (B) *VOC content of each VOC-containing material, including:*
    - (i) *The Grams of VOC Per Liter of Regulated Product, Less Water and Exempt Compounds; and*
    - (ii) *The Grams of VOC Per Liter of Material, including water and exempt compounds;*
  - (C) *Hours of operation;*
  - (D) *Materials used or processed;*

- (E) *Fuel type and usage;*
  - (F) *Throughput;*
  - (G) *Operating parameters;*
  - (H) *Manufacturer specifications;*
  - (I) *Rating plate; and*
  - (J) *Safety Data Sheets.*
- (2) *“All documentation and/or records pursuant to paragraph (f)(1) shall be maintained onsite for three years and made available to the Executive Officer upon request.”*

As described in paragraph (f)(1), it is the responsibility of the owner or operator claiming an exemption under any provision of Rule 219 to maintain documentation and/or calculations sufficient to demonstrate that the stated exemption provision, parameter, requirement, or limitation is applicable. This may involve documentation that the worst case or highest emission potential for any equipment, processes, or operations is below the stated exemption provision, parameter, requirement, or limitation.

#### *Other Clarifications*

##### ***Eating Establishments [(d)(9)]***

Existing Rule 219 subparagraph (d)(9)(E) excludes equipment used in eating establishments for the purpose of preparing food for human consumption from permits. Subparagraph (d)(9)(G) clarifies that the cooking kettle exemption does not include deep frying equipment used in facilities other than eating establishments. PAR 219 does not change these provisions but for the purposes of Rule 219, eating establishments do not include facilities where food is prepared and packaged for subsequent sale, such as retail stores.

##### ***Compliance with Rule 203 [(h)(1)]***

If a facility submits a permit application as a result of this or other PAR 219 amendments that remove exemptions from the rule, submittal of a complete permit application within one year of the effective date of PAR 219 would comply with the compliance date established under paragraph (h)(1).



## **CHAPTER 3 – SUMMARY OF PROPOSED AMENDED RULE 222**

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**OVERVIEW OF PAR 222**

**REVISIONS TO EXISTING RULE PROVISIONS**

## OVERVIEW OF PAR 222

Existing Rule 222 includes references to specific Rule 219 provisions. Due to proposed reformatting and reorganization of multiple provisions in PAR 219, references within the rule have been updated. Accordingly, PAR 222 also reflects the revised references in PAR 219. Updating references in PAR 222 do not change requirements or implementation procedures for facilities. PAR 222 also includes minor changes to streamline recordkeeping requirements, to correct grammatical errors and to improve rule clarity, such as adding specific references to PAR 219, Table 1 where appropriate.

## REVISIONS TO EXISTING RULE PROVISIONS

The following is a summary of PAR 222 revisions. Implementation of existing Rule 222 provisions is clarified at the end of this chapter.

### *Applicability [paragraph (b)(1)]*

The existing Rule 222 subdivision (b) applicability section includes references to equipment that are exempt from Rule 219 and to agricultural diesel-fueled engines subject to the California Air Resources Board Airborne Toxic Control Measure (CARB ATCM) for Stationary Compression Ignition Engines. To improve clarity, the PAR 222 applicability description is separated into two sections with paragraph (b)(1) specifying that the rule is applicable to owners or operators of the emission sources listed in Table I. As previously mentioned, PAR 219 includes a restructuring that has changed all rule references; accordingly, references related to Rule 219 have been updated. PAR 222 also includes non-administrative revisions to Table I. The following is a summary of the proposed non-administrative revisions to Table I.

### *References to Low-VOC Verification Forms*

Table I provisions allow certain equipment (e.g., specific printing, laminating, drying equipment) to submit a low-VOC verification in lieu of a Rule 222 registration. The provision was added during a 2017 amendment to Rule 219 and a low-VOC verification form (Form 109-LVM) was subsequently added to the South Coast AQMD web site. This form represents a one-time submittal and facilities submitting this information are not required to maintain records. During U.S. EPA review of Rule 219, a one-time notification was identified as inconsistent with the necessity for facilities to ensure the necessary records will be maintained to demonstrate applicability of a specific exemption provision. Accordingly, Rule 219 references to a low-VOC verification report have been modified to ensure facilities are required to maintain records on site on an ongoing basis to verify all material used continues to meet VOC content limits or the annual emission limit. To ensure consistency with PAR 219, Table I of PAR 222 removes the option for facilities to submit a low-VOC verification. Below is an example from PAR 222 Table I that removes the low-VOC verification option and includes updated Rule 219 references.

*“Printing and related coating and/or laminating equipment and associated dryers and curing equipment exempt from a written permit pursuant to Rule 219 (d)(8)(A)(ii); ~~(h)(1)(E), unless a low-VOC verification is submitted to the Executive Officer in accordance with Rule 219 (h)(1)(E)(ii).~~”*

Staff has reviewed Rule 222 submittals and has identified one facility that has submitted a low-VOC verification form since the provisions were added in 2017. Under PAR 222, if the facility continued to be subject to a Rule 222 registration, the facility would need to revert to the original registration process that was in effect since 2008. Costs for facilities to submit Rule 222 registration are \$241.95 (effective 7/1/2022 – 6/30/2023) and annual renewals are subject to the same submittal fee.

*Equipment, Processes, or Operations Located At a Facility Holding No Written Permit and Emitting Four Tons or More of VOCs Per Year*

Registration requirements for facilities without permits that emit four tons or more of VOCs per year have been removed from Table I. This change is necessary because PAR 219 removes provisions [including Rule 219 paragraph (s)(3)] that require a Rule 222 submittal as a condition of being exempted from requirements to obtain written permits. Specifically, Rule 219 paragraph (s)(3) currently specifies that facilities that operate the exempt VOC-emitting equipment listed below may require a Rule 222 registration filing if the total emission from this equipment is four tons or more of VOCs per year and the facility does not hold a permit for any other emission sources:

- Printing equipment exempt pursuant to Rule 219 paragraphs (h)(1) and (h)(7);
- Coating or adhesive application or laminating equipment and devices exempt pursuant to Rule 219 paragraphs (l)(6) and (l)(10); and
- Hand applications of VOC-containing materials are exempt pursuant to Rule 219 paragraph (o)(4).

The provisions of Rule 219 paragraph (s)(3) also require the facility to report VOC emissions under the Annual Emissions Reporting (AER) program.

To ensure that the provisions of Rule 219 paragraph (s)(3) remain in effect, paragraph (b)(2) is added in the applicability section to address the filing requirements for facilities without permits that emit four tons or more of VOCs per year from the above listed equipment.

*Other Minor Revisions to Table I*

Other changes made to Table I clarify the existing registration requirements by adding language that is currently present in the definitions of the equipment in subdivision (c) or in the corresponding Rule 219 exemption, and by removing redundant language. Table 3-1 provides a summary of the minor revisions to Table I of Rule 222.

***Applicability [subdivision (b)(2)]***

Paragraph (b)(2) contains the requirements that were in the main paragraph of Rule 219 paragraph (s)(3). As specified below, the reporting period is updated to align with the AER calendar year reporting timeframe, and the references to Rule 219 are updated.

- (2) *“This rule applies to owners or operators of the following emission sources that are located at a single facility, which does not hold a written permit for any other emission sources and emits 4.0 tons or more of VOCs in any calendar year, or emitted 4.0 tons or more of VOCs in the Fiscal Year July 1, 2006 – June 30, 2007:*

- (A) *“Printing operations individually exempted from written permits pursuant to Rule 219 (d)(8)(A) and (d)(8)(G);*

**Table 3-1: Minor Revisions to Table I**

<b>Equipment Description</b>	<b>Rule Language Changes</b>
Natural gas and crude oil production equipment	Clarified that oil well pumps may be registered in groups of four or less, which are defined as oil production well groups, (see definition for Oil Production Well Group in Rule 222). This is currently allowed in the Rule 222 filing program.
Asphalt pavement heaters	Revised to match rule language in Rule 219 subparagraph (d)(1)(E) and clarified the equipment is any mobile equipment used for the purposes of road maintenance and new road construction, including road stripers.
Specified diesel fueled boilers rated less than two (2) million Btu per hour	Added existing fuel usage and NOx emissions thresholds to harmonize the language with the language in the exemption provisions in PAR 219 subparagraph (d)(2)(D).
Fuel Cells	Removed “including heaters,” which is redundant with “heating equipment” earlier in the paragraph.
Portable Diesel Fueled Heaters	Added existing language from the definition of Portable Diesel Fueled Heater in Rule 222 to clarify that the registration requirements apply to heaters used for space heating.

- (B) *“Coating or adhesive application or laminating equipment and devices individually exempted from written permits pursuant to Rule 219 (d)(12)(F) and (d)(12)(J); and*
- (C) *“Hand applications of VOC-containing materials individually exempted from written permits pursuant to Rule 219 (d)(15)(D).”*

***Definitions [subdivision (c)]***

Subdivision (c) specifies the definitions for Rule 222. PAR 222 includes minor revisions to definitions for clarity and Table 3-2 includes a description of the non-administrative revisions.

**Table 3-2: Minor Revisions to Definitions**

<b>Rule Paragraph</b>	<b>Term</b>	<b>Definition Revision</b>
(c)(8)	Charbroiler	Amended to clarify that the heat source of a charbroiler is located either entirely or partly beneath the food being cooked.
(c)(9)	Diesel Fueled Boiler	Added the thresholds of 50 gallons of fuel used per day and maximum NOx emissions of less than one pound per day to harmonize with existing language in the diesel fueled boiler exemption requirement in PAR 219 subparagraph (d)(2)(D).
(c)(13)	Fuel Cell	Removed “including heaters,” which is redundant with “heating equipment” earlier in the paragraph.
(c)(16)	Internal Combustion Engine	Added language that is consistent with the existing language in Table I and the exemption provision in PAR 219 subclause (d)(2)(A)(ii)(B), which specifies that internal combustion engines may also be fired exclusively on compressed natural gas or liquified petroleum gas.

***Requirements [subdivision (d)]***

Paragraph (d)(1) includes general requirements for facilities that register under Rule 222 (e.g., comply with operating conditions, maintain records, etc.). Revisions to subparagraph (d)(1)(C) and the addition of subparagraph (d)(1)(I) are necessary due to the removal of Rule 219 paragraph (s)(3) provisions. Specifically, under subparagraph (d)(1)(C), a revision is necessary to clarify that one filing is required for all the categories of equipment, processes, or operations listed in subparagraphs (b)(2)(A) through (b)(2)(C). A clarification is included in subparagraph (d)(1)(G) to indicate the daily limit of process VOC emissions for food ovens may be verified through the calendar monthly emissions divided by 30, a methodology used to determine daily emission increases used for offset requirements in Rule 1306 Emission Calculations. Food ovens with low process VOC emissions may also demonstrate compliance with the daily limit by calculating the maximum potential to emit assuming full operations including 24 hours of operating hours and maximum loading/throughput. The maximum potential to emit calculation shall be re-assessed when any of the assumptions or parameters are changed. If the equipment’s maximum potential to emit is below the daily limit, a daily operation log is not required but an annual record such as production and purchase record is needed to verify compliance. The daily limit is applicable for each piece of equipment. Verifications/records that are based on emissions from all food ovens at a facility are considered acceptable as long as the facility-wide emissions from this source category are below the daily limit for each piece of equipment.

Subparagraph (d)(1)(I) has been added to ensure that facilities subject to PAR 222 paragraph (b)(2) continue to report emissions under the Annual Emissions Reporting program, pursuant to Rule 301.

***Exemptions [subdivision (f)]***

PAR 222 includes a new subdivision for exemptions to list instances where a registration is not required. Paragraph (f)(1) clarifies that Rule 222 registrations are not applicable to equipment for specified residential dwellings provided such equipment is used by an owner or occupant of the identified dwelling:

*“The provisions of this rule shall not apply to emission sources utilized exclusively in connection with any structure which is designed for and used exclusively as a dwelling for not more than four families, and where such equipment is used by the owner or occupant of such a dwelling.”*

Excluding emission sources at residential dwelling units for not more than four families is consistent with South Coast AQMD permitting procedures and the addition of subdivision (f) is intended to clarify the same procedures for Rule 222 registrations.

Paragraph (f)(2) clarifies that emissions sources with a Permit to Operate issued by South Coast AQMD are not subject to Rule 222 filing provisions.

*Rule 222 Clarification on RECLAIM facilities*

***Boilers or Steam Generators, and Process Heaters at RECLAIM Facilities***

As listed in Table I, boilers/steam generators and process heaters with rated heat inputs from 1,000,000 up to and including 2,000,000 British thermal units (Btu) per hour and that produce less than one pound per day of NO<sub>x</sub> emissions are required to be registered, except for those that are subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM). The NO<sub>x</sub> RECLAIM program is transitioning to a command-and-control regulatory structure. Once a facility exits RECLAIM, a registration filing is required to be submitted for each applicable boilers/steam generator, or process heater within six months of exiting RECLAIM in order to maintain compliance with Rule 222 requirements. Paragraph (e)(2) of Rule 222 currently specifies that an owner or operator of an emission source installed prior to the effective date in Table I and not currently possessing a valid Permit to Operate or open application for a Permit to Operate, shall comply with the requirements of subdivision (d) within six months of the effective date in Table I. PAR 222 includes a clarification that incorporates the same six-month compliance period for an emissions source that becomes subject to the provisions of this rule. A filing can be submitted via the online registration system, or by submitting Form 222-B, both of which are available at <http://www.aqmd.gov/home/permits/rule-222-filing-program>.

## **CHAPTER 4 - IMPACT ASSESSMENT**

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**IMPACT ASSESSMENT**

**CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**SOCIOECONOMIC IMPACT ASSESSMENT**

**DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727**

**COMPARATIVE ANALYSIS**

## IMPACT ASSESSMENT

Rule 219 is an administrative rule that identifies equipment, processes, or operations that emit small amounts of air contaminants to be exempted from written permits. The PAR 219 equipment categories proposed for exemption from written permits all have very small criteria and toxic emissions profile. Amendments to Rule 222 are necessary to update rule references resulting from amendments to Rule 219 and includes editorial and clarification revisions. The following paragraphs summarize available cost impact information.

### *Impacts of PAR 219*

Under existing permitting procedures, affected equipment requiring a written permit is subject to a one-time permit processing fee when applying for a permit, and an annual operating fee thereafter. The proposed amendments do not remove any specific exemptions, except for provisions that are based on compliance dates that have passed. PAR 219 does contain one clarification regarding the filter efficiency for small abrasive blasting cabinets that may result in an increase in permits. In a few instances, PAR 219 would add new equipment for exemption from the requirement to obtain a written permit.

### *Additional Costs*

As mentioned, small manually operated abrasive blasting cabinets are currently exempt from requirements to obtain written permits provided the equipment is vented to a filtration system. PAR 219 subparagraph (d)(6)(B) clarifies that the exemption for small manually operated abrasive blast cabinets and the dust filters venting the cabinets requires the use of dust filters with at least a 90 percent control efficiency. Most equipment are expected to have filters meeting the 90 percent control efficiency, and would not be affected by this revision. For facilities that need to upgrade equipment, dust filters that meet this control efficiency are readily available for purchase but are expected to be more expensive than filters with lower control efficiencies.

Abrasive blasting cabinets are widely used in many types of facilities throughout the South Coast AQMD, such as machine shops, repair shops, and various manufacturing businesses.

### *Additional Savings*

The proposed amendments would add new equipment categories that would not be required to obtain a written permit, the results of which would eliminate or reduce permitting costs of equipment. Affected equipment in these categories potentially includes UV/EB/LED printing and coating equipment that meet the criteria included in subparagraphs (d)(8)(H) and (d)(12)(L) and GIE equipment under subparagraph (d)(4)(M). As mentioned, GIE equipment is currently not required to submit permits to South Coast AQMD. Because the number of facilities that potentially may elect to replace equipment under the new PAR 219 UV/EB/LED provisions is unknown and the fact that GIE equipment is currently not subject to permitting, the PAR 219 potential cost savings have not been estimated.

### *Impacts of PAR 222*

Rule 222 is an administrative rule that provides a simplified filing process in lieu of permitting for certain equipment that have a low emissions profile. Under existing Rule 222, affected equipment



requiring a written permit is subject to an initial filing fee and an annual renewal fee thereafter, as established in the provisions of Rule 301 subdivision (u).

PAR 222 will remove the low-emission verification form option for specified printing, laminating, and drying equipment, which did not have associated fees. Based on a review of Rule 222 filings, one facility has submitted the low-VOC verification form. If the facility continued to be subject to a Rule 222 registration, the facility would need to revert to the original registration process that was in effect since 2008. Costs for facilities to submit Rule 222 registration are \$241.95 (effective 7/1/2022 – 6/30/2023) and annual renewals are subject to the same submittal fee.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PAR 219 and PAR 222) is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). A Notice of Exemption will be prepared pursuant to CEQA Guidelines Section 15062, and if the proposed project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor’s Office of Planning and Research.

### **SOCIOECONOMIC IMPACT ASSESSMENT**

California Health & Safety Code §40440.8 and §40728.5 require a socioeconomic impact assessment for proposed and amended rules resulting in significant impacts to air quality or emission limitations. This assessment shall include affected industries and range of probable costs, effectiveness of control alternatives and emission reduction potential, and make a good faith effort to minimize adverse socioeconomic impacts by analyzing the following elements:

- (1) The type of industries or business, including small business, affected by the rule or regulation.
- (2) The impact of the rule or regulation on employment and the economy of the region affected by the adoption of the rule or regulation.
- (3) The range of probable costs, including costs to industry or business, including small business, of the rule or regulation.
- (4) The availability and cost-effectiveness of alternatives to the rule or regulation being proposed or amended.
- (5) The emission reduction potential of the rule or regulation.
- (6) The necessity of adopting, amending, or repealing the rule or regulation to attain state and federal ambient air standards.

Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II adds a clarification that a permit exemption for small manually operated abrasive blast cabinets (ABC) and the dust filters venting the cabinets require the use of dust filters with at least 90 percent control efficiency. Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II is administrative in nature and is not expected to increase costs as a result of the proposed amendments.

*Affected Facilities and Industries*

Small manually operated abrasive blast cabinets (ABCs) exempted in PAR 219 are used in a variety of industries from machine shops, repair shops, and various manufacturing businesses. The applicable industries within the North American Industrial Classification System (NAICS) include but are not limited to manufacturing (NAICS 31-33), technical services (NAICS 54), and other services (NAICS 81). Some of the affected industries may be classified as small businesses. Since the requirement pertains to maintaining exemption to the permitting requirement, it is not known how many affected and permit-exempt ABCs (and therefore the associated industries) would be subject to the requirements for dust filters.

*Compliance Costs*

Staff consulted filter manufacturers for information on the filter control efficiency of dust filters used in small ABCs and found that all available filters currently exceed the 90 percent efficiency requirement. As such, staff foresees no additional cost as a result of the proposed amendment to PAR 219. Since there are no anticipated additional costs, a detailed industry impact and cost quantification is not necessary. Some currently exempt small ABCs used in permitted facilities *could* have possibly installed filters below the required 90 percent efficiency and would potentially incur additional costs to maintain the permit exemption of PAR 219.<sup>13</sup> Staff assumes this to be a negligible number of affected ABCs, but the cost of acceptable filters for PAR 219 would range from \$100 to \$250 each, depending on size.

*Regional Macroeconomic Impacts*

Staff expects the cost of compliance for PAR 219/222 to be minimal. It has been a standard practice for South Coast AQMD's socioeconomic impact assessments that, when the annual compliance cost is less than or close to one million current U.S. dollars annually, the Regional Economic Models Inc. (REMI)'s Policy Insight Plus Model is not used to simulate jobs and macroeconomic impacts, as is the case here. This is because the resultant impacts would be too small relative to the baseline regional economy to reliably determine any impacts from the modeling analysis.

**DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727***Requirements to Make Findings*

Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

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<sup>13</sup> Since small abrasive blasting cabinets are currently exempt from permitting under Rule 219, it is possible that a dust filter rated below 90 percent control efficiency could be used. However, all manufactured dust filters investigated by staff (Action Filtration <https://www.actionfiltration.com>, Surface Prep <https://surfaceprep.com/>) were found to meet the minimum control efficiency of the proposed amendments.

*Necessity*

The South Coast AQMD Governing Board finds and determines that Proposed Amended Rules 219 and 222; Equipment and Not Requiring a Written Permit Pursuant To Regulation II and Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II, is necessary to clarify recordkeeping and reporting, and provide a simpler, more expeditious and cost-effective option to local facilities and the South Coast AQMD.

*Authority*

The South Coast AQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Health and Safety Code Sections 40000, 40001, 40440, and 42300 et seq.

*Clarity*

The South Coast AQMD Governing Board finds and determines that PAR 219 and PAR 222 are written and displayed so that the meaning can be easily understood by persons directly affected by it.

*Consistency*

The South Coast AQMD Governing Board finds and determines that PAR 219 and PAR 222 are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or federal or state regulations.

*Non-Duplication*

The South Coast AQMD Governing Board has determined that PAR 219 and PAR 222 do not impose the same requirement as any existing state or federal regulation, and the proposed amendments are necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

*Reference*

In adopting PAR 219 and PAR 222, the South Coast AQMD Governing Board references the following statutes which South Coast AQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 40000, 40001, 40440, and 42300 et seq.

**COMPARATIVE ANALYSIS**

Health and Safety Code Section 40727.2 requires written analysis identifying any federal or other South Coast AQMD rules or requirements that apply to the same equipment or source type as the proposed amendments. The proposed amended rules do not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting or recordkeeping requirements and, therefore, further written analysis is not required pursuant to Health and Safety Code Section 40727.2(g).

## **APPENDIX A – CLEAN AIR ACT SECTION 110(L) ANALYSIS**

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**INTRODUCTION**

**ANALYSIS OF RULE SECTIONS**

**CONCLUSIONS**

## INTRODUCTION

A State Implementation Plan (SIP) is a collection of regulations and documents used by a state, territory, or local air district to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and to fulfill other requirements of the Clean Air Act (CAA). South Coast AQMD is required to submit its rules and regulations relevant to controlling the six criteria air pollutants (carbon monoxide, lead, nitrogen oxides, ozone, particulate matter, and sulfur dioxide) to U.S. EPA for SIP approval. The CAA requires areas which have been designated nonattainment with the NAAQS to develop a permitting program to ensure that the preconstruction review requirements for new or modified stationary sources of air contaminants are met. The South Coast Air Basin (Basin) and the Coachella Valley are in nonattainment with the federal ozone standards; the Basin is also in nonattainment with the federal PM<sub>2.5</sub> standards.

The underlying basis for the South Coast AQMD's permitting programs is found in Regulation II – Permits. Rule 201 – Permits to Construct and Rule 203 – Permits to Operate set forth the scope of the South Coast AQMD's jurisdictional and permitting authority under the applicable statutes. Regulation XIII was adopted in compliance with the 1990 amendments to the Federal Clean Air Act for approval into the SIP to specify preconstruction review requirements for new or modified stationary sources of air contaminants. As a part of such preconstruction review program, 40 CFR 51.160(e) allows a state (in this case the South Coast AQMD) to “identify types and sizes of facilities, buildings, structures, or installations which will be subject to review” and “discuss the basis for determining which facilities will be subject to review.”

CAA Section 110(l) (42 U.S.C. 7410(l)) requires that any SIP submission which might be construed as a relaxation of a requirement provide a demonstration that the change not interfere with any CAA requirements concerning attainment. This appendix provides a justification regarding the amount of potential emissions change, if any, expected from the addition/change of specific permit-exempt equipment in Proposed Amended Rule 219 (PAR 219) relative to the SIP approved version of Rule 219, and serves as the analysis required under CAA Section 110(l).

## ANALYSIS OF RULE SECTIONS

The version of Rule 219 last reviewed by U.S. EPA and approved into the SIP is dated September 4, 1981. Rule 219 has been revised many times since then and was submitted to U.S. EPA review and approval into the SIP, but U.S. EPA has not taken action to approve any of these revisions. PAR 219 will be submitted to U.S. EPA for approval to replace the SIP-approved Rule 219.

The following paragraphs provide a description of Rule 219 revisions made since the regulation was SIP-approved in 1981. The discussion includes an assessment to determine if the Rule 219 revisions made since 1981 could interfere with any CAA requirements concerning attainment with applicable NAAQS. Subdivision (d) of PAR 219 lists equipment, processes, and operations that are exempted from obtaining permits. As previously mentioned, Rule 219 has been subject to many revisions since 1981. To facilitate the evaluation of revisions to the list of equipment, processes, and operations made since 1981, an evaluation matrix has been developed and is presented in Table A-1.

*Subdivision (a) – Purpose*

Subdivision (a) is a new addition to Rule 219 since the SIP-approved version that clarifies that the purpose of Rule 219 is to identify equipment, processes, or operations that emit small amounts of air contaminants that do not require permits, unless they fall under an exception in subdivision (e) of the rule. The second sentence in this subdivision informs stakeholders that select equipment may also require registration pursuant to Rule 222. Subdivision (a) does not contain any requirements that may relax SIP-approved Rule 219 requirements.

*Subdivision (b) – Applicability*

Subdivision (b) is a new addition to Rule 219 since the SIP-approved version that clarifies the applicability of Rule 219.

*Subdivision (c) – Definitions*

Subdivision (c) is a new addition to Rule 219 since the SIP-approved version that consolidates definitions into a separate subdivision, consistent with other South Coast AQMD rules. Subdivision (c) provides additional clarity to the rule and does not contain any requirements that may relax the requirements in SIP-approved Rule 219.

*Subdivision (d) - Equipment, Processes, or Operations Not Requiring a Written Permit*

Subdivision (d) of PAR 219 contains 18 groups of exempted equipment, where each group lists similar types of equipment. Almost all new listed exemptions, as compared with the SIP-approved version of Rule 219, have been placed into one of the following five emission-based exemption categories:

- A. Equipment that is not subject to NSR;
- B. Equipment or processes not subject to a corresponding South Coast AQMD emission control rule;
- C. Area-wide sources regulated under state or federal law;
- D. Equipment, operations or processes with trivial emissions; or
- E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.

The evaluation for each of the five category is discussed below.

***A. Equipment that is not subject to NSR***

NSR programs are required to apply to new and modified stationary sources. The U.S. EPA has defined stationary source as “any building, structure, facility or installation which emits or may emit a regulated NSR pollutant.” Accordingly, NSR programs do not apply to mobile sources, which are regulated under title II of the CAA.

***B. Equipment or processes not subject to a corresponding South Coast AQMD emission control rule***

This category includes equipment, processes, or operations that are exempt from South Coast AQMD emission control rule requirements due to output size, low emissions, or type of fuel used. The thresholds in the exemptions in this category are set at levels below which any environmental benefit would be trivial or not cost-effective to regulate because of the small size or nature of the equipment, process or operation.

***C. Area-wide sources regulated under State or federal law***

Area-wide sources include source categories associated with human activity and emissions that occur over a wide geographic area. Some examples include consumer products and architectural coatings. It is often easier to regulate such sources at the point of sale, rather than when they are used. This category exempts such area-wide sources which are regulated by state or federal law prior to use.

***D. Equipment, operations, or processes with trivial emissions***

The U.S. EPA has previously provided a list of activities and units it considers to be trivial as part of the “White Paper for Streamlined Development of Part 70 Permit Applications” (July 10, 1995)<sup>14</sup>. Trivial activities are typically those with extremely small emissions where there is no size or material restriction used as the basis for exempting such equipment. Examples of trivial units and activities include ink jet printers, bench scale laboratory equipment and laundry activities. Exempting these types of sources from NSR permit requirements is consistent with the flexibility allowed to states to exempt sources that do not need to be regulated in order to attain and/or maintain any of the NAAQS. Emissions from these types of operations and processes are not expected to impact the South Coast AQMD’s ability to attain or maintain any NAAQS.

***E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used***

This grouping includes equipment or processes that contain limitations on their size, type of material or fuel used. These equipment or processes are limited below the threshold that would trigger any South Coast AQMD emission control rule requirements. Additionally, even if such emission units were subject to permit requirements, they are not subject to any emission control requirements and therefore permitting would not result in any emission reductions. Accordingly, the addition of these exemptions should have no effect on the South Coast AQMD’s ability to attain or maintain any NAAQS.

The following three exemption provisions in the Agricultural Sources subdivision do not fall in any of the above five categories:

- Subparagraph (d)(17)(A), which exempts unmodified existing (July 7, 2006 and prior) internal combustion engines (ICEs) and gasoline transfer and dispensing equipment at agricultural sources;

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<sup>14</sup> U.S. EPA. <https://www.epa.gov/title-v-operating-permits/white-paper-streamlined-development-part-70-permit-applications>

- Subparagraph (d)(17)(B), which exempts emergency ICEs at agricultural sources; and
- Subparagraph (d)(17)(C), which exempts agricultural permit units at agricultural sources not subject to Title V with actual emissions less than the amounts listed in Table 1.

Senate Bill 700 (SB 700)<sup>15</sup> was enacted on January 1, 2004, which removed the state-wide permitting exemption for agricultural sources from state law, and authorized the air pollution control districts to issue permits for agricultural sources and equipment as required. Subsequent amendments to Rule 219 included exemptions for specified agricultural sources and equipment that were deemed to have relatively lower emissions. Any potential additional emissions from these exemptions would be offset by the removal of the general exemption for agricultural sources and equipment.

Table A-1, located at the end of Appendix A, provides additional discussion regarding the individual exemptions in PAR 219.

#### *Subdivision (e) – Exceptions*

Subdivision (e) is a new addition to Rule 219 since the SIP-approved version that establishes instances where otherwise exempt equipment, processes, and operations are required to obtain written permits. The rule language in subparagraphs (e)(1)(A) and (B) was previously in the opening paragraph of the rule. Language was added to clarify that they do not apply to ICEs rated below 50 bhp, which are exempt from permitting pursuant to clause (d)(2)(A)(i). Subparagraph (e)(1)(C) was added to exclude from exemption equipment that are subject to emission limitation requirements in an Air Toxic Control Measure (ATCM) or in the National Emission Standards for Hazardous Air Pollutants (NESHAP).

The provisions in paragraph (e)(2) apply when the Executive Officer has determined that otherwise-exempt equipment, processes, and operations require permits due to the following:

- Exceedance of the health risk limits established in Rule 1401 - New Source Review of Toxic Air Contaminants.
- Non-compliance with South Coast AQMD rules or regulations.
- The equipment is operated or maintained in a manner that is inconsistent with any exemption in Rule 219 and results in excess emissions.

Paragraph (e)(3) clarifies that South Coast AQMD may request information as needed to determine health risk. This paragraph requires that the requested information be submitted via a completed permit application within 60 days of the South Coast AQMD's request.

Paragraph (e)(4) excludes from exemption equipment or control equipment that are subject to permitting requirements pursuant to Regulation XIV - Toxics and Other Non-criteria Pollutants.

These provisions have been added to Rule 219 to ensure that equipment, processes, or operations listed as exempt, pursuant to subdivision (d), do not negatively impact air quality. The provisions provide guardrails so that the subject equipment do not emit air contaminants that could cause an

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<sup>15</sup> CARB. <https://ww3.arb.ca.gov/ag/sb700/sb700.htm>



exceedance of health risk limits or are not in compliance with South Coast AQMD rules. The revised rule is at least as stringent of air quality as the SIP-approved version.

#### *Subdivision (f) – Recordkeeping*

Subdivision (f) is a new addition to Rule 219 since the SIP-approved version that clarifies the recordkeeping requirements needed to demonstrate applicability of any exemption provision in the rule. Paragraph (f)(1) requires any owner or operator claiming an exemption to maintain sufficient documentation to verify its applicability and provides examples of documents that could be provided to make a demonstration. Paragraph (f)(2) requires records to be maintained for three (3) years and made available upon request.

Subdivision (f) provides additional clarity and increase enforceability of the rule and does not contain any requirements that may relax the requirements in SIP-approved Rule 219.

#### *Subdivision (g) – Test Methods*

Subdivision (g) is a new addition to Rule 219 since the SIP-approved version that requires that test methods used to verify the composition and characteristics of materials and equipment that validate an exemption are approved by U.S. EPA, CARB, or South Coast AQMD. The previous SIP-approved rule does not contain test methods. The addition of these test methods provides additional clarity and enforceability to the rule and does not contain any requirements that may relax the requirements in SIP-approved Rule 219.

#### *Subdivision (h) – Compliance Dates*

Subdivision (h) is a new addition to Rule 219 since the SIP-approved version. The requirements in this subdivision are administrative in nature, setting the compliance dates that permit applications must be submitted for specified instances when exemptions are no longer applicable. Paragraph (h)(1) provides a year to comply with South Coast AQMD's permitting rules when Rule 219 is amended to remove an exemption. Paragraph (h)(2) establishes a compliance date for subparagraphs (d)(5)(U) and (d)(16)(W). The provisions in this subdivision do not affect emissions.

## **CONCLUSIONS**

While new exemptions have been added to Rule 219 since the SIP-approved version of the rule, the potential emission increases from these new exemptions are offset by potential emission reductions from existing exemptions that have been made much more stringent. Additionally, the applicability of several existing exemptions has been significantly narrowed or have been removed. As included in Table A-1, the following are examples where thresholds have been reduced or cases when exemptions have been removed from Rule 219 since the SIP-approved version:

- Reduced rating for ICEs: from 500 brake horsepower (bhp) to 50 bhp;
- Reduced rating for boilers, steam generators, and heaters: from 20 million British Thermal Units (Btu) to two (2) million Btu;
- Removed exemptions for most printing operations, and added exemptions based on thresholds for low usage, emissions, or VOC content of materials;

- Removed exemption for furnaces that hold lead or any alloy containing over 50 percent lead; and
- Removed exemption for metal finishing tanks that contain nickel, lead, or cadmium.

As potential emission increases due to the new permit exemptions are offset by potential emission reductions from existing exemptions having been made significantly more stringent, it is concluded that the changes made since the SIP-approved version of Rule 219 do not interfere with NAAQS attainment efforts or any other applicable requirement of the CAA.

**Table A-1: PAR 219 Clean Air Act Section 110(l) Analysis**

Sections	Changes Since 1981 SIP-Approval	Analysis
(a) Purpose		
<p>The purpose of this rule is to identify equipment, processes, or operations that emit small amounts of air contaminants that shall not require written permits, unless such equipment, process or operation is subject to subdivision (e) – Exceptions. Certain equipment, processes, or operations that do not require written permits may be subject to Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II.</p>	<p>New language. Original language at the top of the SIP-approved version has been moved to subdivision (e), Exceptions.</p>	<p>Language is new and describes the purpose of Rule 219 and is new compared to the SIP-approved version of the rule. Second sentence informs stakeholders that select equipment may also require registration pursuant to Rule 222. This section does not include a relaxation of requirements.</p>
(b) Applicability		
<p>This rule applies to owners or operators of the equipment, processes, or operations listed in subdivision (d).</p>	<p>New</p>	<p>Language is new to improve rule clarity and does not include a relaxation of requirements.</p>
(c) Definitions		
<p>For the purpose of this rule, the following definitions shall apply:  [See provisions in PAR 219 (c)(1) through (7)]</p>	<p>New. SIP-approved version of Rule 219 did not list any definitions.</p>	<p>Definitions added for clarity and this section does not result in relaxation of requirements.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
(d) Equipment, Processes, or Operations Not Requiring a Written Permit		
(1) Mobile Equipment	Subdivision (a) now listed in paragraph (d)(1).	
<p>This paragraph does not apply to air contaminant emitting equipment which is mounted and operated on motor vehicles, marine vessels, mobile hazardous material treatment systems, or mobile day tankers.</p>	<p>Language was revised to state more specifically that provision does not apply to air contaminant emitting equipment--rather than equipment requiring a permit--that are mounted on vehicles. Language was removed that exempted equipment mounted on vehicles used exclusively to transport materials.</p>	<p>Removed language that limited the vehicles equipment could be mounted and operated on. Equipment that do not emit air contaminants are exempt from permitting, and may be mounted on any vehicle, regardless of whether the vehicles are used to exclusive transport materials.</p> <p>See 110(l) analysis for subdivision (d), Category A. Equipment or operations which are not subject to NSR program requirements because they are not stationary sources.</p>
(A) Motor vehicle or vehicle as defined by the California Vehicle Code	New	<p>See 110(l) analysis for subdivision (d), Category A. Equipment or operations which are not subject to NSR program requirements because they are not stationary sources.</p>
(B) Marine vessel as defined by Health and Safety Code Section 39037.1	New	<p>See 110(l) analysis for subdivision (d), Category A. Equipment or operations</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
		which are not subject to NSR program requirements because they are not stationary sources.
(C) A motor vehicle or a marine vessel that uses one internal combustion engine to propel the motor vehicle or marine vessel, and the same engine to operate other equipment mounted on the motor vehicle or marine vessel.	New	See 110(l) analysis for subdivision (d), Category A. Equipment or operations which are not subject to NSR program requirements because they are not stationary sources.
(D) Equipment that is mounted on a vehicle, motor vehicle or marine vessel if such equipment does not emit air contaminants.	New	See 110(l) analysis for subdivision (d), Category B. Equipment or processes not subject to a South Coast AQMD emission control rule.
(E) Asphalt pavement heater, which is any mobile equipment used to heat asphalt or coal tar pitch for purposes of road maintenance or new road construction.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(F) Mobile day tankers which only carry fuel oil with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F).	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(2) Combustion and Heat Transfer Equipment	Subdivision (b) now listed in paragraph (d)(2)	
(A)(i) Internal combustion engines that have a manufacturer's rating of 50 brake horsepower or less	Formerly located in paragraph (b)(1). Exemption was tightened from 500 bhp or less.	Exemption was tightened; ICEs rated over 51 bhp now require permits. ICEs rated 50 bhp are also exempt from

Sections	Changes Since 1981 SIP-Approval	Analysis
		emissions requirements in Rules 1110.2, 1470, and 1472.
<p>(A)(ii) Internal combustion engines that are used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a half mile radius and the internal combustion engine:</p> <p>(A) Have a manufacturer's rating of 100 brake horsepower or less; and</p> <p>(B) Are fired exclusively on diesel #2 fuel, compressed natural gas (CNG), liquefied petroleum gas (LPG).</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
<p>(B) Stationary gas turbine engines including micro-turbines, with a rated maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that</p> <p>(i) The cumulative power output of all such engines at a facility is less than two (2) megawatts; and</p> <p>(ii) The engines were certified at the time of manufacture with CARB or were in operation prior to May 3, 2013.</p>	Formerly located in paragraph (b)(1). Exemption was tightened from 5,950,000 Btu/hr or less.	Exemption was tightened.
<p>(C) Boilers, process heaters, or any combustion equipment with a rated maximum heat input capacity of 2,000,000 Btu per hour (gross) or less and are equipped to be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof. This exemption does not apply to internal combustion engines or turbines. This exemption does not apply to:</p>	Formerly located in paragraph (b)(2). Exemption was tightened from 20,000,000 Btu/hr or less.	Exemption was tightened.

Sections	Changes Since 1981 SIP-Approval	Analysis
(i) Internal combustion engines; (ii) Turbines; or (iii) Boilers, process heaters, or any combustion equipment whenever there are emissions other than products of fuel combustion, except for food ovens with a rated maximum heat input capacity of 2,000,000 Btu/hour or less, that are fired exclusively on natural gas and where the process VOC emissions are less than one pound per day.		
(D) Diesel fueled boilers with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and where the maximum Oxides of Nitrogen (NOx) emission output of the equipment is less than one (1) pound per day and uses less than 50 gallons of fuel per day, and have been in operation prior to May 3, 2013. This exemption does not apply whenever there are emissions other than products of combustion.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(E) Portable diesel fueled heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less, and that are equipped with burner(s) designed to fire exclusively on diesel fuel only.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(F) Power pressure washers and hot water or steam washers and cleaners, that are equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with non-resettable chronometer, and the maximum NOx emission	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the

Sections	Changes Since 1981 SIP-Approval	Analysis
output of the equipment is less than one (1) pound per day and uses no more than 50 gallons of fuel per day. This exemption does not apply to internal combustion engines or turbines.		equipment, the type of material used or amount of material used.
(G)(i) Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, provided the heating equipment does not use a combustion source.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(G)(ii) Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, provided the heating equipment is fueled exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(H) Test cells and test stands used for testing burners or internal combustion engines provided that the equipment uses less than 800 gallons of diesel fuel and 3,500 gallons of gasoline fuel per year, or uses other fuels with equivalent or less emissions.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(I) Internal combustion engines used exclusively for training at educational institutions.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.



Sections	Changes Since 1981 SIP-Approval	Analysis
(J) Portable combustion equipment, pursuant to paragraph (d)(18) – Registered Equipment.	New	Provision points to combustion equipment that would be exempt pursuant to paragraph (d)(18), and is used to clarify rule intent.
(3) Structures and Equipment - General	Subdivision (c) now listed in paragraph (d)(3).	
(A) Structural changes which cannot change the quality, nature or quantity of air contaminant emissions.	Formerly in (c)(1)	No change from SIP-approved Rule 219.
(B) Repairs or maintenance not involving structural changes to any equipment for which a permit has been granted.	Formerly in (c)(2)	No change from SIP-approved Rule 219.
(C) Replacement of identical equipment, as defined in Rule 301 - Permitting and Associated Fees, at a facility that is not a federal major source, as defined in 40 CFR 51.165 or 52.21, where a permit to operate had previously been granted for such equipment, except seals for external or internal floating roof storage tanks.	Formerly in (c)(3)	No change from SIP-approved Rule 219.
(D) Routine maintenance, repair or replacement of a part of any equipment at a facility that is a federal major source, as defined in 40 CFR 51.165 or 52.21, where a permit to operate had previously been issued for such equipment, based on U.S. EPA guidance in determining routine maintenance, repair, or replacement.	New	As part of the definition of “Major Modification” in 40 CFR 51.165(a)(1)(v)(C), U.S. EPA explicitly excludes certain types of physical changes or changes in the method of operation, such as routine maintenance, repair and replacement, from being considered modifications for the purpose of the NSR program.

Sections	Changes Since 1981 SIP-Approval	Analysis
(E) Replacement of floating roof tank seals provided that the replacement seal is of a type and model which the Executive Officer has determined is capable of complying with the requirements of Rule 463 – Organic Liquid Storage.	New	As part of the definition of “Major Modification” in 40 CFR 51.165(a)(1)(v)(C), U.S. EPA explicitly excludes certain types of physical changes or changes in the method of operation, such as routine maintenance, repair and replacement, from being considered modifications for the purpose of the NSR program. Rule 463 lists compliant types and models of seals.
(F) Equipment utilized exclusively in connection with any structure which is designed for and used exclusively as a dwelling for not more than four families, and where such equipment is used by the owner or occupant of such a dwelling.	Formerly in (c)(4). Added clarification that equipment is used by dwelling owners or occupants.	No change in requirements from SIP-approved Rule 219.
(G) Laboratory testing and quality control testing equipment used exclusively for chemical and physical analysis, and the control equipment used to exclusively vent such equipment. Laboratory testing equipment does not include engine test stands or test cells unless such equipment is also exempt pursuant to subparagraph (d)(2)(H).	Formerly in (c)(5). Added clarification to language, which exempted laboratory equipment used exclusively for chemical and physical analysis and bench scale or laboratory test equipment.	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(H) Non-production bench scale research equipment, and the control equipment used to exclusively vent such equipment.	Bench scale test equipment formerly exempted in (c)(5), now given its own provision, and exemption now includes associated control equipment.	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.

Sections	Changes Since 1981 SIP-Approval	Analysis
(I) Vacuum-producing devices used in laboratory operations or in connection with other equipment not requiring a written permit.	Formerly in (c)(6)	No change from SIP-approved Rule 219.
(J) Vacuum-cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.	Formerly in (c)(7)	No change from SIP-approved Rule 219.
(K) Hoods, stacks, or ventilators.	Formerly in (c)(8), which exempted natural-draft hoods, natural-draft stacks, and natural-draft ventilators.	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(L) Passive and intermittently operated active venting systems used at and around residential structures to prevent the accumulation of naturally occurring methane and associated gases in enclosed spaces.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(M) Sub-slab ventilation systems including associated air pollution control equipment with an aggregate flow rate of less than 200 standard cubic feet per minute (scfm) where vacuum suction pits do not penetrate more than 18 inches below the bottom of the slab, provided the inlet total organic compounds concentration does not exceed 15 ppmv, measured as hexane, and provided the ventilation system is connected to air pollution control equipment consisting of a carbon adsorber sized to handle at least 200 scfm, or equivalent air pollution control.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(4) Utility Equipment - General	Subdivision (d) now listed in paragraph (d)(4)	
(A) Comfort air conditioning or ventilating systems which are not designed or used to remove air contaminants generated by, or released from, specific equipment units, provided such	Formerly in (d)(1), with added language to limit the exemption to equipment also exempt pursuant to (d)(2)(C) or (d)(2)(D).	Tightened existing exemption; does not allow exemptions for equipment that does not meet parameters of (d)(2)(C) or (d)(2)(D).

Sections	Changes Since 1981 SIP-Approval	Analysis
systems are also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D).		
(B) Refrigeration units except those used as or in conjunction with air pollution control equipment.	Formerly in (d)(2)	No change from SIP-approved Rule 219.
(C) Water cooling towers and water cooling ponds that are not used for evaporative cooling of process water or used for evaporative cooling of water from barometric jets or from barometric condensers, and in which no chromium compounds are contained, including:  (i) Cooling towers used for comfort cooling; and (ii) Industrial cooling towers located in a chemical plant, refinery or other industrial facility.	Formerly in (d)(3). Removed exemption for cooling towers or ponds containing chromium compounds. Added language to clarify types of equipment included in the exemption.	Tightened existing exemption; removes exemption for equipment containing chromium compounds.
(D) Equipment used exclusively to generate ozone and associated ozone destruction equipment for the treatment of cooling tower water or for water treatment processes.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(E) Equipment used exclusively for steam cleaning provided such equipment is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D).	Formerly in (d)(4), with added language to limit the exemption to equipment also exempt pursuant to (d)(2)(C)	Tightened existing exemption; does not allow exemptions for equipment that does not meet parameters of (d)(2)(C).
(F) Equipment used exclusively for space heating provided such equipment is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D).	Formerly in (d)(5), with added language to limit the exemption to equipment also exempt pursuant to (d)(2)(C)	Tightened existing exemption; does not allow exemptions for equipment that does not meet parameters of (d)(2)(C).
(G) Equipment used exclusively to compress or hold purchased Quality Natural Gas, provided any internal combustion engine is also exempt pursuant to subparagraph (d)(2)(A).	Formerly in (d)(6), with added language to limit the exemption to	Tightened existing exemption; does not allow exemptions for ICEs that do not meet parameters of (d)(2)(A).

Sections	Changes Since 1981 SIP-Approval	Analysis
	ICEs also exempt pursuant to (d)(2)(A)	
(H) Emergency ventilation systems used exclusively to scrub ammonia from refrigeration systems during process upsets or equipment breakdowns.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(I) Emergency ventilation systems used exclusively to contain and control emissions resulting from the failure of a compressed gas storage system.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(J) Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, without mechanical ventilation, and used exclusively for odor control at wastewater treatment plants, food waste slurry storage tanks, or sewer collection systems, including sanitary sewers, manholes, and pump stations.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(K) Refrigerant recovery and/or recycling units. This exemption does not include refrigerant reclaiming facilities.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(L) Carbon arc lighting equipment provided such equipment is also exempt pursuant to subparagraph (d)(2)(A).	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(M) Gas-insulated equipment with a voltage of 245 kilovolts or less, used in electrical power generation, transmission and distribution operations, that use a VOC-containing gas as an insulating medium, with a maximum leak rate of less than one percent per year under normal operating conditions.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(5) Glass, Ceramic, Metallurgical Processing and Fabrication Equipment	Subdivision (e) now listed in paragraph (d)(5)	

Sections	Changes Since 1981 SIP-Approval	Analysis
(A) Crucible-type or pot-type furnaces with a capacity of less than 7,400 cubic centimeters (452 cubic inches) of any molten metal, and the control equipment used to exclusively vent the furnace.	Formerly in (e)(1). Added language to include control equipment venting the furnaces.	Addition of control equipment to the exemption does not change emissions.
(B) Crucible furnaces, pot furnaces, or induction furnaces with a capacity of 450 kilograms (992 pounds) or less each, and the control equipment used to exclusively vent the furnaces, where: (i) No sweating or distilling is conducted; (ii) The furnaces are also exempt pursuant to subparagraph (d)(2)(C); and (iii) Only the following materials are poured or held in a molten state, and these materials do not contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead: (A) Aluminum or any alloy containing over 50 percent aluminum; (B) Magnesium or any alloy containing over 50 percent magnesium; (C) Tin or any alloy containing over 50 percent tin; (D) Zinc or any alloy containing over 50 percent zinc; (E) Copper or any alloy containing over 50 percent copper; (F) Precious metals; and (G) Ceramic materials, including glass and porcelain.	Formerly in (e)(2). Added language to limit exemption to furnaces that meet parameters in (d)(2)(C), and to remove exemption if materials contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead. Removed exemption for furnaces processing lead. Added processing of ceramic materials to exemption	Tightened existing exemption. Does not allow exemptions for furnaces that don't also meet parameters of (d)(2)(C), or that process the specified toxic metals. This is expected to offset any additional emissions resulting from the inclusion of furnaces that process ceramic materials to the exemption.
(C) Molds used for the casting of metals and the control equipment used to exclusively vent the equipment.	Formerly in (e)(3). Added language to include control equipment.	Addition of control equipment to the exemption does not change emissions.
(D) Inspection equipment used exclusively for metal, plastic, glass, or ceramic products and the control equipment used to exclusively vent such equipment.	Formerly in (e)(4). Exemptions added for inspection equipment used for plastic, glass, or ceramic products.	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.

Sections	Changes Since 1981 SIP-Approval	Analysis
(E) Ovens used exclusively for curing potting materials or castings made with epoxy resins, provided such ovens are also exempt pursuant to subparagraph (d)(2)(C).	Formerly in (e)(5), with added language to limit the exemption to ovens also exempt pursuant to (d)(2)(C)	Tightened existing exemption; does not allow exemptions for equipment that does not meet parameters of (d)(2)(C).
(F) Hand-held or automatic brazing and soldering equipment, and the control equipment used to exclusively vent such equipment, provided that the equipment uses one (1) quart per day or less or 22 quarts per calendar month or less of material containing VOC. This exemption does not include hot oil, hot air, or vapor phase solder leveling equipment, and associated control equipment.	Exemption for brazing and soldering equipment and the associated control equipment was formerly in (e)(6). Language clarifies that equipment may be hand-held or automatic. VOC material threshold added. Descriptive language added to exception for solder leveling equipment. Plasma arc cutting addressed in (d)(5)(H).	Tightened existing exemption by adding a VOC material threshold.
(G) Brazing ovens where no VOCs (except flux) are present in the materials processed in the ovens, provided such ovens are also exempt pursuant to subparagraph (d)(2)(C).	New	See 110(l) analysis for subdivision (d), Category B. Equipment or processes not subject to a South Coast AQMD emission control rule.
(H) Welding equipment, oxygen gaseous fuel-cutting equipment, hand-held plasma-arc cutting equipment, hand-held laser cutting equipment, laser etching or engraving equipment and associated air pollution control equipment. This exemption does not include cutting equipment described in this paragraph that is used to cut stainless steel, or alloys containing 0.1 percent by weight or more of chromium, nickel, cadmium or lead, unless the equipment is used exclusively for maintenance or repair operations. In addition this exemption does not include laser cutting, etching and engraving equipment that are rated at more than 400 watts.	Exemption for welding equipment, oxygen gaseous fuel-cutting equipment, and associated APCE was formerly in (e)(6). Added exemption for plasma-arc cutting equipment. Also adds exceptions for equipment used to cut metals containing specified toxic metals (unless used exclusively for maintenance or repairs). Added size threshold for equipment.	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
(I) Sintering equipment used exclusively for the sintering of metal (excluding lead) or glass where no coke or limestone is used, and the control equipment used to exclusively vent such equipment, provided such equipment is also exempt pursuant to subparagraph (d)(2)(C).	Formerly in (e)(7). Removed exemption for sintering of lead, and added language to limit exemption to equipment that meet parameters in (d)(2)(C).	Tightened existing exemption by removing exemption for lead sintering and does not allow exemptions for equipment that does not meet parameters of (d)(2)(C).
(J) Mold forming equipment for foundry sand to which no heat is applied, and where no volatile organic materials are used in the process, and the control equipment used to exclusively vent such equipment.	Formerly in (e)(8). Added language to require that no VOCs are used in the process.	Tightened existing exemption by removing exemption for processes that use VOC materials.
(K) Metal forming equipment or equipment used for heating metals for forging, rolling, pressing, or drawing of metals provided that any lubricants used contain 50 Grams of VOC Per Liter of Material or less, or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F), and the control equipment used to exclusively vent the equipment, provided such metal forming equipment or equipment used for heating metals are also exempt pursuant to subparagraph (d)(2)(C) or (d)(2)(D).	Formerly in (e)(9). Added thresholds for VOC content and composite partial pressure for lubricants. Also added language to limit exemption to equipment that meet parameters in (d)(2)(C) or (d)(2)(D). Included associated APCE with the exemption.	Tightened existing exemption with requirements for VOC content and composite partial pressure of VOC-containing materials. Addition of control equipment to the exemption does not change emissions.
(L) Heat treatment equipment and associated water quench tanks used exclusively for heat treating glass or metals (provided no VOC materials are present), or equipment used exclusively for case hardening, carburizing, cyaniding, nitriding, carbonitriding, siliconizing or diffusion treating of metal objects, provided any combustion equipment involved is also exempt pursuant to subparagraph (d)(2)(C) or (d)(2)(D).	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(M) Ladles used in pouring molten metals.	Formerly in (e)(11).	No change from SIP-approved Rule 219.



Sections	Changes Since 1981 SIP-Approval	Analysis
(N) Tumblers used for the cleaning or deburring of solid materials, and the associated air pollution control equipment.	Formerly in (e)(12). Changed from the cleaning or deburring of metal to that of solid materials, and added exemption of associated APCE.	Cleaning or deburring of solid materials creates no more emissions than does the work on metals. Addition of control equipment to the exemption does not change emissions.
(O) Die casting machines. This exemption does not apply to die casting machines used for copper base alloys, with an integral furnace having a capacity of more than 450 kg (992 lbs.), or die casting machines using a furnace not exempt pursuant to subparagraph (d)(2)(C).	Formerly in (e)(13). Added language to limit exemption to furnaces that meet parameters in (d)(2)(C).	Tightened existing exemption by not allow exemptions for equipment that does not meet parameters of (d)(2)(C).
(P) Furnaces or ovens used for the curing or drying of porcelain enameling or vitreous enameling, provided such furnaces or ovens are also exempt pursuant to subparagraph (d)(2)(C).	Formerly in (e)(14). Removed exception for units fired with fuel oil, and added language to limit exemption to equipment that meet parameters in (d)(2)(C).	Tightened existing exemption by not allow exemptions for equipment that does not meet parameters of (d)(2)(C), which includes a fuel requirement that equipment be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof.
(Q) Wax burnout kilns where the total internal volume is less than 0.2 cubic meter (7.0 cubic feet) or kilns used exclusively for firing ceramic ware, and the control equipment used to exclusively vent the equipment, provided such kilns are also exempt pursuant to subparagraph (d)(2)(C).	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(R) Shell-core and shell-mold manufacturing machines.	New	See 110(l) analysis for subdivision (d), Category B. Equipment or processes not subject to a South Coast AQMD emission control rule.

Sections	Changes Since 1981 SIP-Approval	Analysis
(S) Furnaces used exclusively for melting titanium materials in a closed evacuated chamber where no sweating or distilling is conducted, provided such furnaces are also exempt pursuant to subparagraph (d)(2)(C).	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(T) Vacuum metallizing chambers which are electrically heated or heated with equipment that is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D), and the control equipment used to exclusively vent such equipment, provided the control equipment is equipped with a mist eliminator or the vacuum pump used with control equipment demonstrates operation with no visible emissions from the vacuum exhaust.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used.
(U) Notwithstanding the exemptions in subparagraph (d)(5)(L), equipment existing as of May 5, 2017 that qualifies for the exemption in subparagraph (d)(5)(L), that is an integral part of an operation requiring a written permit shall continue to be exempt, provided the equipment is identified, described in detail and submitted for inclusion into the permit equipment description with any associated application for Permit to Construct or Permit to Operate. Equipment described in this subparagraph includes, but is not limited to, quench tanks that are part of a heat treating operation.	New	This is an administrative provision that requires exempt equipment that is integral to a heat treating operation be added to an existing permit, when the permit is required to be amended (e.g., a change in operating conditions). Intent of this provision is to clearly identify equipment in heat treating operations, which may consist of numerous quench tanks and other types of equipment. This provision does not contain any new exemptions.
(6) Abrasive Blasting Equipment	Subdivision (f) now listed in paragraph (d)(6)	

Sections	Changes Since 1981 SIP-Approval	Analysis
(A) Blast cleaning cabinets in which a suspension of abrasive in water is used and the control equipment used to exclusively vent such equipment.	Formerly in (f)(1)	No change from SIP-approved Rule 219.
(B) Manually operated abrasive blast cabinets, vented to a dust filter with at least 90 percent overall control efficiency (capture and collection efficiency) where the total internal volume of the blast section is 1.5 cubic meters (53 cubic feet) or less, and the dust filter venting such equipment.	Formerly in (f)(2). Language added to specify that manually operated abrasive blast cabinets are exempt. Language also exempts dust filters with at least a 90 percent overall control efficiency.	Tightens the exemption by: limiting it to only manually operated cabinets, and requiring the cabinets to be vented to dust filters that meet the required control efficiency.
(C) Enclosed equipment used exclusively for shot blast removal of flashing from rubber and plastics at sub-zero temperatures and the control equipment used to exclusively vent such equipment.	Formerly in (f)(3).	No change from SIP-approved Rule 219.
(D) Shot peening operations using a flywheel, and the control equipment used to exclusively vent such equipment.	Shot peening exemption was formerly in (f)(4), which exempted shot peening operations on non-ferrous materials, provided no surface material is removed. Exemption is now just for flywheel shot peening operations.	Tightens exemption by limiting only shot peening operations using a flywheel to be exempt, rather than a typical shot peening operation that uses a forced air, which creates more particulate emissions.
(E) Portable sand/water blaster equipment and associated internal combustion engine provided the water in the mixture is maintained at 66 percent or more by volume during operation of such equipment, provided the internal combustion engine is also exempt pursuant to subparagraph (d)(2)(A).	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or amount of material used. Abrasive blasting must also comply with the provisions of South Coast AQMD Rule 1140.

Sections	Changes Since 1981 SIP-Approval	Analysis
(7) Mechanical Equipment	Subdivision (g) now listed in paragraph (d)(7)	
(A) Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used contain 50 Grams of VOC Per Liter of Material or less or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F), and the control equipment used to exclusively vent such equipment. This exemption does not include asphalt pavement grinders or portable asphalt recycling equipment.	Formerly in (g)(1). Added VOC content/composite partial pressure threshold for lubricants, coolants, and cutting oils. Clarified that asphalt pavement grinders or portable asphalt recycling equipment are not exempt under this provision.	Tightens the exemption by adding the VOC threshold, as well as with the clarification that asphalt pavement grinders and portable asphalt recycling equipment are not exempt.
(B) Equipment used exclusively for shredding of wood, or the extruding, handling, or storage of wood chips, sawdust, or wood shavings and the control equipment used to exclusively vent such equipment, provided the source of the wood does not include wood that is painted or treated for exterior exposure, or wood that is comingled with other construction and demolition materials. This exemption does not include:  (i) Internal combustion engines over 50 brake horsepower, which are used to supply power to the equipment in subparagraph (d)(7)(B); or  (ii) The shredding, extruding, handling or storage of any organic waste material generated from gardening, agricultural, or landscaping activities including, but not limited to, leaves, grass clippings, tree and shrub trimmings and plant remains.	Formerly in (g)(2). Added language that does not allow equipment processing painted or treated wood, or wood comingled with construction or demolition materials to qualify for this exemption. Added language to clarify that ICEs must be rated 50 bhp or below. Also added language to clarify that the exemption does not include equipment processing gardening, agricultural or landscaping material.	Tightens the exemption and reduces emissions by not allowing the processing of contaminated wood. Clarification added to ensure that ICEs must be rated 50 bhp or lower to meet the rating limit in (d)(2)(A)(i), and that this exemption does not apply to equipment processing gardening, agricultural or landscaping material.

Sections	Changes Since 1981 SIP-Approval	Analysis
(C) Equipment used exclusively to mill or grind, coatings or molding compounds, where all materials charged are in paste form.	Formerly in (g)(3)	No change from SIP-approved Rule 219.
(D) Equipment used for separation or segregation of plastic materials intended for recycling, provided there is no mechanical cutting, shredding or grinding, and where no odors are emitted.	New	See 110(l) analysis for subdivision (d), Category B. Equipment or processes not subject to a South Coast AQMD emission control rule.
(8) Printing and Reproduction Equipment	<p>Subdivision (h) now listed in paragraph (d)(8). All of the provisions in this subdivision are new. SIP-approved version of the rule had only 4 exemptions:</p> <p>(1) Printing equipment without dryers.</p> <p>(2) Photographic process equipment by which an image is reproduced upon material sensitized by radiant energy and control equipment venting exclusively such equipment.</p> <p>(3) Printing equipment with dryers, electrically heated, or with a rating of 20,000,000 BTU per hour or less, equipped to fire natural gas or liquefied petroleum gas, used exclusively for the drying or baking of surface coatings which contain no volatile organic compounds.</p>	<p>The exemptions in the SIP-approved version of the rule were broad and covered an extensive amount of printing equipment, including all printing equipment without dryers and printing equipment with dryers rated 20,000,000 Btu/hr or less, which was the exemption rating threshold for combustion equipment. There were no exemptions based on VOC limits or thresholds. All of these exemptions have been removed. The new provisions contain more tailored exemptions that apply to smaller, low-emission operations.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
	<p>(4) Platen presses used in laminating.                      (1), (3), and (4) have been removed.                      (2) is now listed in (d)(8)(B), but with exceptions added to the provision.</p>	

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(A) Graphic arts operations including printing, coating and/or laminating equipment, and associated dryers and curing equipment, and the associated air pollution control equipment, provided such dryers and curing equipment are also exempt pursuant to subparagraph (d)(2)(C), and the air pollution control equipment is not required for source specific rule compliance, and provided that:</p> <p>(i) The uncontrolled VOC emissions from such equipment (including clean-up) are three pounds per day or less or 66 pounds per calendar month or less;</p> <p>(ii) The total quantity of plastisol type inks, coatings and adhesives and associated VOC containing solvents (including clean-up) used is six gallons per day or less or 132 gallons per calendar month or less;</p> <p>(iii) The total quantity of UV/EB/LED (non-solvent based and non-waterborne) inks, coatings, and adhesives, fountain solutions (excluding water) and associated VOC containing solvents (including clean-up) used is six gallons per day or less, or 132 gallons per calendar month or less;</p> <p>(iv) The total quantity of inks, coatings and adhesives not specified in clauses (d)(8)(A)(ii) or (d)(8)(A)(iii) above, fountain solutions (excluding water) and associated VOC containing solvents (including clean-up) used is two gallons per day or less or 44 gallons per calendar month or less; or</p> <p>(v) All inks, coatings and adhesives, fountain solutions, and associated VOC containing solvents (excluding cleanup solvents) contain 50 grams or less of VOC per liter of material and all cleanup solvents contain 25 grams or less of VOC per</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>liter of material, and the total quantity of VOC emissions do not exceed one ton per calendar year.</p> <p>If a combination of the inks, coatings, and adhesives identified in clauses (d)(8)(A)(ii), (d)(8)(A)(iii), and/or (d)(8)(A)(iv) are used in any equipment, this exemption is only applicable if the operations meet the criteria specified in clauses (d)(8)(A)(i) or (d)(8)(A)(v), or the total usage of inks, coatings, adhesives, fountain solutions (excluding water) and associated VOC containing solvents (including cleanup) meets the most stringent applicable limit in clauses (d)(8)(A)(ii), (d)(8)(A)(iii), or (d)(8)(A)(iv). For exemptions based on usage, solvent based UV and waterborne UV materials are subject to the usage limits in clause (d)(8)(A)(iv).</p>		
(B) Photographic process equipment by which an image is reproduced upon material sensitized by radiant energy and the control equipment exclusively venting such equipment, excluding wet gate printing utilizing perchloroethylene and its associated control equipment.	Formerly in (h)(2). Added exception for wet gate printing utilizing perchloroethylene and its associated control equipment.	Tightened by removing exemption for wet gate printing utilizing perchloroethylene, which is a TAC.
(C) Lithographic printing equipment which uses laser printing.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(D) Printing equipment used exclusively for training and non-production at educational institutions.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(E) Flexographic plate making and associated processing equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.



Sections	Changes Since 1981 SIP-Approval	Analysis
(F) Corona treating equipment and the associated air pollution control equipment used for surface treatment in printing, laminating and coating operations.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(G) Hand application of materials used in printing operations including but not limited to the use of squeegees, screens, stamps, stencils, any hand tools, and the associated air pollution control equipment used to exclusively vent the hand application of materials in printing operations, unless such air pollution control equipment is required for source specific rule compliance.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
<p>(H) The addition of UV/EB/LED curing technology, or other curing or drying technology, to an existing permitted graphics arts equipment or operation if:</p> <p>(i) The equipment remains consistent with the description in the existing Permit to Operate, excluding the addition of curing or drying equipment operated exclusively using electrical power;</p> <p>(ii) The equipment complies with the conditions specified in the existing Permit to Operate;</p> <p>(iii) There is no physical change to the configuration of the existing air pollution control equipment associated with the equipment or operation;</p> <p>(iv) There is no physical change to the configuration of an existing permanent total enclosure associated with the equipment or operation;</p> <p>(v) All inks, coatings, solvents, or other materials associated with the technology do not contain any toxic air contaminants pursuant to Rule 1401 – New Source Review of Toxic Air</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>Contaminants, as listed on the Safety Data Sheet, except as allowed under the existing Permit to Operate; and</p> <p>(vi) All inks, coatings and adhesives, fountain solutions, and VOC containing solvents associated with the technology (excluding cleanup solvents) contain 50 grams or less of VOC per liter of material and all cleanup solvents associated with the technology contain 25 Grams of VOC Per Liter of Material or less.</p>		
(9) Pharmaceuticals, Cosmetics and Food Processing and Preparation Equipment	Subdivision (i) for Food Processing and Preparation Equipment and pharmaceuticals and cosmetics provision from (m)(7) now listed in paragraph (d)(9)	
(A) Smokehouses for preparing food in which the maximum horizontal inside cross-sectional area does not exceed two square meters (21.5 square feet) and control equipment exclusively venting the equipment.	Formerly in (i)(1). Control equipment added to the exemption	No change from SIP-approved Rule 219. Addition of control equipment to the exemption does not change emissions.
(B) Smokehouses exclusively using liquid smoke, and which are completely enclosed with no vents to either a control device or the atmosphere.	Formerly in (i)(2).	No change from SIP-approved Rule 219.
(C) Confection cookers where products are edible and intended for human consumption, provided such equipment is also exempt pursuant to subparagraph (d)(2)(C).	Formerly in (i)(3). Added language to ensure cookers that meet the food ovens exemption in (d)(2)(C)	Tightened exemption by ensuring exemption is applicable to confection

Sections	Changes Since 1981 SIP-Approval	Analysis
		cookers that meet the rating and VOC emissions thresholds in (d)(2)(C).
(D) Grinding, blending, or packaging equipment used exclusively for tea, cocoa, roasted coffee, flavor, fragrance extraction, dried flowers, or spices, provided that the facility uses less than one gallon per day or 22 gallons per month of VOC containing solvents, and the control equipment used to exclusively vent such equipment.	Tea, cocoa, and roasted coffee processing equipment and associated control equipment formerly listed in (i)(4). Spices processing equipment formerly listed in (i)(7). Added exemptions for equipment processing flavor, fragrance extraction, and dried flowers. Added facility threshold for use of VOC containing solvents.	Tightened exemption by including a limit on VOC-containing solvent usage, which applies to all processing equipment listed here, even equipment processing the new categories of materials (flavor, fragrance extraction, and dried flowers).
(E) Equipment used in eating establishments for the purpose of preparing food for human consumption.	Formerly in (i)(5).	No change from SIP-approved Rule 219.
(F) Equipment used to convey or process materials in bakeries, or used to produce noodles, macaroni, pasta, food mixes, and drink mixes where the products are edible and intended for human consumption and the control equipment used exclusively to vent such equipment, provided that the facility uses less than one gallon per day or 22 gallons per month of VOC containing solvents and the equipment is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D).  This exemption does not include storage bins located outside buildings.	Former provision in (i)(6) exempted ovens, mixers, scales and blenders used in bakeries where products are edible and intended for human consumption and control equipment venting exclusively such equipment. Broadened language to include all equipment. Added VOC solvent usage threshold. Added language to ensure boilers/heaters and food ovens are also exempt pursuant to their relevant provisions.	Tightened exemption by including a limit on VOC-containing solvent usage, and by ensuring that the combustion equipment is also exempt pursuant to their relevant provisions.
(G) Cooking kettles where the entire product in the kettle is edible and intended for human consumption. This exemption	Formerly in (i)(8). Added language to clarify that deep frying equipment	No changes in requirement from SIP-approved Rule 219. Clarifies exemption to avoid conflict with

Sections	Changes Since 1981 SIP-Approval	Analysis
does not include deep frying equipment used in facilities other than eating establishments.	used in eating establishments are exempt.	exemption for equipment used at eating establishments in (d)(9)(E).
(H) Coffee roasting equipment with a maximum batch capacity of 15 kilograms or less, and the control equipment used to exclusively vent the equipment.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(I) Equipment used exclusively for tableting, or packaging vitamins, or coating vitamins, herbs, or dietary supplements and the control equipment used exclusively to vent such equipment, provided that the equipment uses waterborne solutions that contain 25 grams or less of VOC per liter of material, or the facility uses less than one gallon per day or 22 gallons per month of VOC containing solvents.	Exemption for this equipment in (d)(9)(I) and (J) was initially in (m)(7). Added requirement to use waterborne solutions and to meet thresholds for either the VOC content or VOC material usage.	Tightened exemption by adding the requirement to use waterborne solutions and to meet either of the VOC-related thresholds.
(J) Equipment used exclusively for tableting or packaging pharmaceuticals and cosmetics, or coating pharmaceutical tablets and the control equipment used exclusively to vent such equipment, provided that the equipment uses waterborne solutions with a VOC content of no more than 25 grams per liter, or the facility uses less than one gallon per day or 22 gallons per month of VOC containing solvents.	Exemption for this equipment in (d)(9)(I) and (J) was initially in (m)(7). Added requirement to use waterborne solutions and to meet thresholds for either the VOC content or VOC material usage.	Tightened exemption by adding the requirement to use waterborne solutions and to meet either of the VOC-related thresholds.
(K) Modified atmosphere food packaging equipment using mixture of gases of that contain no more than 0.4 percent carbon monoxide by volume.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
(L) Charbroilers, barbecue grills, and other underfired grills fired on solid or gaseous fuels used in residential units, provided the equipment is only used by the owner or occupant of such dwelling for non-commercial purposes.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(M) Equipment used to brew beer for human consumption at breweries that produce less than 1,000,000 gallons of beer per calendar year and associated cleaning equipment, provided all equipment used in the manufacturing operation is also exempt pursuant to subparagraphs (d)(2)(C), and the cleaning equipment is also exempt pursuant to paragraph (d)(15). This exemption does not apply to boilers.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(N) Equipment used to manufacture dehydrated meat for human or pet consumption, provided:  (i) The dehydrating oven is either electric or has a maximum rated heat input capacity of 2,000,000 Btu/hour or less and is fired exclusively on natural gas;  (ii) The operating temperature for the dehydrating oven is less than 190 degrees Fahrenheit; and  (iii) The non-combustion VOC and particulate matter (PM) emissions, including emissions from materials used for cleaning, are each one pound per day or less.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(O) Food ovens with a rated maximum heat input capacity of 325,000 Btu/hour or less, that are fired exclusively on natural gas, where no baking occurs, and no emissions other than products of combustion occur.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
(10) Plastics, Composite and Rubber Processing Equipment	Subdivision (j) now listed in paragraph (d)(10)	
(A) Presses or molds used for curing, post curing, or forming composite products and plastic products where no VOC or chlorinated blowing agent is present, and the control equipment is used exclusively to vent these presses or molds.	(j)(1) exempted presses used for curing rubber products and plastic products. Added requirement that no VOC or chlorinated blowing agent may be present. Included control equipment in the exemption.	Tightened exemption by adding the blowing agent limitation. Addition of control equipment to exemption does not increase emissions.
(B) Presses or molds with a ram diameter of less than or equal to 26 inches used for curing or forming rubber products and composite rubber products, excluding those operating above 400 °F.	(j)(1) exempted presses used for curing rubber products and plastic products. Added size and operational temperature limitations to the equipment. Included control equipment in the exemption.	Tightened exemption by adding size and temperature limitations.
(C) Ovens used exclusively for the forming of plastics or composite products, where no foam forming or expanding process is involved, provided such ovens are also exempt pursuant to subparagraph (d)(2)(C).	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(D) Equipment used exclusively for softening or annealing plastics, provided such equipment is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D). This exemption does not include equipment used for recycling of expanded polystyrene.	Formerly in (j)(2). (d)(10)(D) removes exemption for ovens used for plastics curing, and equipment used for recycling of expanded polystyrene. Also limits exemption to equipment meeting the parameters of (d)(2)(C) or (d)(2)(D).	Tightened exemption by removing: exemption for ovens used for curing of plastics which are concurrently being vacuum held to a mold, equipment handling expanded polystyrene. Exemption also tightened by limiting equipment to the parameters of (d)(2)(C) or (d)(2)(D).

Sections	Changes Since 1981 SIP-Approval	Analysis
(E) Extrusion equipment used exclusively for extruding rubber products or plastics where no organic plasticizer is present, or for pelletizing polystyrene foam scrap. This exemption does not apply to equipment used to extrude or to pelletize acrylics, polyvinyl chloride, polystyrene, and their copolymers.	Formerly in (j)(3). Added requirement that no organic plasticizer is present.	Tightened exemption with the added requirement.
(F) Injection or blow molding equipment for rubber or plastics where no blowing agent is used, or where only compressed air, water or carbon dioxide is used as a blowing agent, and control equipment used to exclusively vent such equipment.	Formerly in (j)(4). Removed exemption for equipment used for compression molding of plastics, and for equipment where only compressed air, water or CO <sub>2</sub> is used as a blowing agent. Added exemption for equipment processing rubber.	Tightened exemption by removing application for compression molding equipment and by removing use of blowing agents that may contain air contaminants. Emissions from the added exemption for processing rubber are offset by the overall tightened exemption. See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(G) Mixers, roll mills and calendars for rubber or plastics where no material in powder form is added and no VOC containing solvents, diluents or thinners are used.	Formerly in (j)(5).	No change from SIP-approved Rule 219.
(H) Ovens used exclusively for the curing of vinyl plastisols by the closed-mold curing process, provided such ovens are also exempt pursuant to subparagraph (d)(2)(C).	Formerly in (j)(6). Added requirement that ovens must also be exempt pursuant to parameters of (d)(2)(C).	Tightened exemption by adding requirement to meet the parameters of (d)(2)(C).
(I) Equipment used exclusively for conveying and storing plastic materials, provided they are not in powder form and the control equipment used exclusively to vent the equipment.	Formerly in (j)(7), which exempted equipment used exclusively for conveying and storing plastic pellets.	Expanded exemption to equipment that conveys and stores plastic materials not in powder form, which may result in minimal emissions. See 110(l) analysis for subdivision (d),

Sections	Changes Since 1981 SIP-Approval	Analysis
		Category D. Equipment, operations, or processes with trivial emissions. Exemption also now includes associated control equipment, which does not change emissions.
(J) Hot wire cutting of expanded polystyrene foam and woven polyester film.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(K) Photocurable stereolithography equipment and associated post curing equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(L) Laser sintering equipment used exclusively for the sintering of nylon or plastic powders and the control equipment used exclusively to vent such equipment, provided such equipment is also exempt pursuant to subparagraph (d)(2)(C).	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
<p>(M) Roller to roller coating systems that create 3-dimensional images provided:</p> <p>(i) The VOC emissions from such equipment (including cleanup) are three pounds per day or less or 66 pounds per calendar month or less;</p> <p>(ii) The coatings contain 25 Grams of VOC Per Liter of Material or less provided that the coating used on such equipment is 12 gallons per day or less or 264 gallons per calendar month or less; or</p> <p>(iii) The coatings contain 50 Grams of VOC Per Liter of Material or less, and all cleanup solvents used contain 25 grams or less of</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.



Sections	Changes Since 1981 SIP-Approval	Analysis
<p>VOC per liter of material, and the total quantity of VOC emissions do not exceed one ton per calendar year.</p>		
<p>(11) Mixing, Blending and Packaging Equipment</p>	<p>Subdivision (k) now listed in paragraph (d)(11)</p>	
<p>(A) Batch mixers, which have a maximum capacity of 55 gallons or less (7.35 cubic feet) and the control equipment used exclusively to vent the equipment, and the associated filling equipment.</p>	<p>Formerly in (k)(1). Exemption expanded to include slightly larger batch mixers (from 7 cubic feet or less) and associated control equipment.</p>	<p>Inclusion of control equipment does not result in emission changes. Harmonizes exemption to commonly used batch mixers used for 55-gallon drums. Capacity limit is increased by a miniscule amount, 0.35 cubic feet, or 5% over the original exemption. See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>
<p>(B) Equipment used exclusively for mixing and blending materials, and the associated filling equipment, provided no VOC containing solvents are used and no materials in powder form are added.</p>	<p>Formerly in (k)(2). Expanded exemption by removing the requirement that the mixing and blending of materials be used in the manufacturing of adhesives and by including the associated filling equipment.</p>	<p>Limitations on no VOC containing solvents and no powders remain in place, which greatly reduces emissions. See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
(C) Equipment used exclusively for mixing and blending materials to make water emulsions of asphalt, grease, oils, or waxes where no materials in powder or fiber form are added.	Formerly in (k)(3).	No change from SIP-approved Rule 219.
(D) Equipment used to blend, grind, mix, or thin liquids to which powders may be added, with a capacity of 950 liters (251 gallons) or less, where no supplemental heat is added and no ingredient charged (excluding water) exceeds 135 °F and the control equipment used exclusively to vent the equipment.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(E) Cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer and the holding tank feeding the filling equipment provided the mixer and holding tank are also exempt under this rule.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(F) Concrete mixers, with a rated working capacity of one cubic yard or less and the control equipment used exclusively to vent the equipment.	Formerly in (k)(7). Expanded exemption to include control equipment.	Inclusion of control equipment does not result in emission changes.
(G) Equipment used exclusively for packaging lubricants or greases.	Formerly in (m)(7).	No change from SIP-approved Rule 219.
(H) Equipment used exclusively for packaging sodium hypochlorite-based household cleaning or sodium hypochlorite-based pool products and the control equipment used exclusively to vent the equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(I) Foam packaging equipment using 20 gallons per day or less or 440 gallons per calendar month or less of liquid foam material or containing 50 Grams of VOC Per Liter of Material or less.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the

Sections	Changes Since 1981 SIP-Approval	Analysis
		equipment, the type of material used or the amount of material used.
(12) Coating and Adhesive Process/Equipment	New paragraph that incorporates provisions from subdivision (m) - Miscellaneous Process Equipment	
(A) Equipment used exclusively for coating objects with oils, melted waxes or greases which contain no VOC containing materials, including diluents or thinners.	Formerly in (m)(8).	No change from SIP-approved Rule 219.
(B) Equipment used exclusively for coating objects by dipping in waxes or natural and synthetic resins which contain no VOC containing materials including, diluents or thinners.	Formerly in (m)(9)	No change from SIP-approved Rule 219.
(C) Batch ovens with 1.5 cubic meters (53 cubic feet) or less internal volume where no melting occurs, provided such equipment is also exempt pursuant to subparagraph (d)(2)(C). This exemption does not include ovens used to cure vinyl plastisols or debond brake shoes.	Formerly in (m)(11). Added limit that ovens must meet the parameters of (d)(2)(C).	Inclusion of control equipment does not result in emission changes.
(D) Ovens used exclusively to cure 30 pounds per day or less or 660 pounds per calendar month or less of powder coatings, provided that such equipment is also exempt pursuant to subparagraph (d)(2)(C).	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(E) Spray coating equipment operated within control enclosures.	Formerly in (m)(14)	No change from SIP-approved Rule 219.

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(F) Coating or adhesive application or laminating equipment such as air, airless, air-assisted airless, high volume low pressure (HVLP), air brushes, electrostatic spray equipment, roller coaters, dip coaters, vacuum coaters, flow coaters and spray machines provided that:</p> <p>(i) The VOC emissions from such equipment (including clean-up) are three pounds per day or less or 66 pounds per calendar month or less;</p> <p>(ii) The total quantity of UV/EB/LED (non-solvent based and non-waterborne) coatings, adhesives and associated VOC containing solvents (including clean-up) used in such operations is six gallons per day or less or 132 gallons per calendar month or less;</p> <p>(iii) The total quantity of organic solvent based coatings and adhesives and associated VOC containing solvents (including clean-up) used in such equipment is one gallon per day or less or 22 gallons per calendar month or less;</p> <p>(iv) The total quantity of water reducible or waterborne coatings and adhesives and associated VOC containing solvents (including clean-up) used in such equipment is three gallons per day or less or 66 gallons per calendar month or less;</p> <p>(v) The total quantity of polyester resin and gel coat type materials and associated VOC containing solvents (including clean-up) used in such equipment is one gallon per day or less or 22 gallons per calendar month or less; or</p> <p>(vi) All coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (excluding cleanup solvents) contain 50 Grams of VOC Per Liter of</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>Material or less and all cleanup solvents contain 25 Grams of VOC Per Liter of Material or less, and the total quantity of VOC emissions do not exceed one ton per calendar year. Rule 222 may be applicable.</p> <p>If combination of the coatings, adhesives and polyester resin and gel coat type materials identified in clauses (d)(12)(F)(ii), (d)(12)(F)(iii), (d)(12)(F)(iv), and/or (d)(12)(F)(v) are used in any equipment, this exemption is only applicable if the operations meet the criteria specified in clauses (d)(12)(F)(i) or (d)(12)(F)(vi), or the total usage of coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (including cleanup) meets the most stringent applicable limit in clauses (d)(12)(F)(ii), (d)(12)(F)(iii), (d)(12)(F)(iv), or (d)(12)(F)(v). For exemptions based on usage, solvent-based UV and waterborne UV materials are subject to the usage limits in clauses (d)(12)(F)(iii) and (d)(12)(F)(iv), respectively.</p>		
<p>(G) Spray coating and associated drying equipment and control enclosures, used exclusively for educational purposes in educational institutions.</p>	<p>Formerly in (m)(17), which exempted equipment used exclusively in primary and secondary schools.</p>	<p>Change of provision to include equipment used for educational purposes in educational institutions removes the exemption for equipment that may be used for non-educational purposes at schools, such as for facility maintenance. See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
(H) Control enclosures with an internal volume of 27 cubic feet or less, provided that aerosol cans, air brushes, or hand applications are used exclusively.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(I) Portable coating equipment and pavement stripers used exclusively for the application of architectural coatings, and associated internal combustion engines provided such equipment is also exempt pursuant to paragraph (d)(1) or subparagraph (d)(2)(A), and provided no supplemental heat is added during pavement striping operations.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(J) Hand application of resins, adhesives, dyes, and coatings using devices such as brushes, daubers, rollers, and trowels.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(K) Drying equipment such as flash-off ovens, drying ovens, or curing ovens associated with coating or adhesive application, or laminating equipment provided the drying equipment is also exempt pursuant to subparagraph (d)(2)(C), and provided that:</p> <p>(i) The total quantity of VOC emissions from all coating and/or adhesive application, and laminating equipment that the drying equipment serves is three pounds per day or less or 66 pounds per calendar month or less;</p> <p>(ii) The total quantity of UV/EB/LED (non-solvent based and non-waterborne) coatings and adhesives, and associated VOC containing solvents (including clean-up) used in all coating and/or adhesive application, and laminating equipment that the drying equipment serves is six gallons per day or less or 132 gallons per calendar month or less;</p> <p>(iii) The total quantity of solvent based coatings and adhesives and associated VOC containing solvents (including clean-up) used in all coating and/or adhesive application, and laminating equipment that the drying equipment serves is one gallon per day or less or 22 gallons per calendar month or less;</p> <p>(iv) The total quantity of water reducible or waterborne coating and adhesives and associated VOC containing solvents (including clean-up) used in all coating and/or adhesive application, and laminating equipment that the drying equipment serves is three gallons per day or less or 66 gallons per calendar month or less;</p> <p>(v) The total quantity of polyester resin and gel coat type materials and associated VOC containing solvents (including clean-up) used in all coating, adhesive application, and laminating equipment that the drying equipment serves is one</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>gallon per day or less or 22 gallons per calendar month or less; or,</p> <p>(vi) All coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (excluding cleanup solvents) contain 50 Grams of VOC Per Liter of Material or less and all cleanup solvents contain 25 Grams of VOC Per Liter of Material or less, and the total quantity of VOC emissions do not exceed one ton per calendar year. Rule 222 may be applicable.</p> <p>If a combination of the coatings, adhesives and polyester resin and gel coat type materials identified in clauses (d)(12)(K)(ii), (d)(12)(K)(iii), (d)(12)(K)(iv), and/or (d)(12)(K)(v) are used in any equipment, this exemption is only applicable if the operations meet the criteria specified in clauses (d)(12)(K)(i) or (d)(12)(K)(vi), or the total usage of coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (including cleanup) meets the most stringent applicable limit in clauses (d)(12)(K)(ii), (d)(12)(K)(iii), (d)(12)(K)(iv), or (d)(12)(K)(v). For exemptions based on usage, solvent-based UV and waterborne UV materials are subject to the usage limits in clauses (d)(12)(K)(iii) and (d)(12)(K)(iv)(C), respectively.</p>		



Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(L) The addition of UV/EB/LED curing technology, or other curing or drying technology, to an existing permitted coating equipment or operation if:</p> <p>(i) The equipment remains consistent with the description in the existing Permit to Operate, excluding the addition of curing or drying equipment operated exclusively using electrical power;</p> <p>(ii) The equipment complies with the conditions specified in the existing Permit to Operate;</p> <p>(iii) There is no physical change to the configuration of the existing air pollution control equipment associated with the equipment or operation;</p> <p>(iv) There is no physical change to the configuration of an existing permanent total enclosure associated with the equipment or operation;</p> <p>(v) All coatings, solvents, or other materials associated with the technology do not contain any toxic air contaminants pursuant to Rule 1401, as listed on the Safety Data Sheet, except as allowed under the existing Permit to Operate; and</p> <p>(vi) All coatings, solvents, or other materials associated with the technology (excluding cleanup solvents) contain 50 Grams of VOC Per Liter of Material or less and all cleanup solvents associated with the technology contain 25 Grams of VOC Per Liter of Material or less.</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>
<p>(13) Storage and Transfer Equipment</p>	<p>Subdivision (n) now listed in paragraph (d)(13)</p>	

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(A) Equipment used exclusively for the storage and transfer of fresh, commercial or purer grades of:</p> <p>(i) Sulfuric acid or phosphoric acid with an acid strength of 99 percent or less, by weight;</p> <p>(ii) Nitric acid with an acid strength of 70 percent or less, by weight; or</p> <p>(iii) Water based solutions of salts or sodium hydroxide.</p>	Formerly in (n)(1). Added exemption in clause (iii): water based solutions of salts or sodium hydroxide.	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
<p>(B) Equipment used exclusively for the storage and/or transfer of liquefied gases, not including:</p> <p>(i) LPG with a capacity of greater than 10,000 pounds;</p> <p>(ii) Hydrogen fluoride with a capacity of greater than 100 pounds.</p> <p>(iii) Anhydrous ammonia with a capacity of greater than 500 pounds.</p>	Formerly in (n)(2). Added exceptions to the exemptions in clauses (i) through (iii).	Addition of the exceptions tightens the exemption.
<p>(C) Equipment used exclusively for the transfer of less than 75,700 liters (20,000 gallons) per day of unheated VOC containing materials, with an initial boiling point of 150 °C (302 °F) or greater, or with an organic vapor pressure of five (5) mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F).</p>	Formerly in (n)(3). Removed exemptions for equipment handling fuel oils. Other provisions contain exemptions for equipment handling fuel oils.	No change in remaining provisions.
<p>(D) Equipment used exclusively for the storage and/or dispensing of unheated VOC containing materials with an initial boiling point of 150 °C (302 °F) or greater, or with an organic vapor pressure of five mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F). This exemption does not include liquid fuel storage greater than 160,400 liters (40,000 gallons).</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
(E) Equipment used exclusively for transferring VOC containing liquids, materials containing VOCs, or compressed gases into containers with a capacity of less than 225 liters (60 gallons). This exemption does not include equipment used for transferring more than 4,000 liters (1,057 gallons) of materials per day with a vapor pressure greater than 25.8 mm Hg (0.5 psia) at operating conditions.	Formerly in (n)(4). Maximum vapor pressure limit was reduced from 77.5 Hg.	Reducing maximum vapor pressure limit tightens the exemption.
(F) Equipment used exclusively for the storage and transfer of liquid soaps, liquid detergents, vegetable oils, fatty acids, fatty esters, fatty alcohols, waxes and wax emulsions.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(G) Equipment used exclusively for the storage and transfer of refined lubricating or hydraulic oils and the control equipment used exclusively to vent such equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(H) Equipment used exclusively for the storage and transfer of crankcase drainage oil and the control equipment used exclusively to vent such equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(I) Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, with a holding capacity of less than 950 liters (251 gallons); or equipment used exclusively for the storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment used exclusively for such equipment. This exemption does not include asphalt. In addition, this exemption does not apply to a group of more than one VOC-containing liquid or odorant tank where a single product is stored, where the combined storage capacity of all tanks exceeds 950 liters (251 gallons), and where the tanks are mounted on a shared mobile platform and stored at a facility.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
(J) A retail mobile fueler with a cumulative storage capacity less than or equal to 10 gallons of gasoline, excluding one individual portable fuel container with a capacity up to 6.6 gallons of gasoline.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(K) A non-retail mobile fueler with a cumulative storage capacity less than or equal to 120 gallons of gasoline, excluding one individual portable fuel container with a capacity up to 6.6 gallons of gasoline.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(L) Equipment used exclusively for the storage and transfer of "top white" (i.e., Fancy) or cosmetic grade tallow or edible animal fats intended for human consumption and of sufficient quality to be certifiable for United States markets.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(M) Equipment, including tar pots (or tar kettles), used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a maximum holding capacity of less than 600 liters (159 gallons); or equipment, including tar pots (or tar kettles), used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a maximum holding capacity of no more than 3,785 liters (1,000 gallons), if such equipment is equipped with burner(s) designed to fire exclusively on liquefied petroleum gases.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(N) Pumps used exclusively for pipeline transfer of liquids.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.

Sections	Changes Since 1981 SIP-Approval	Analysis
(O) Equipment used exclusively for the unheated underground storage of organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psi) absolute or less at actual storage conditions with a capacity of 23,000 liters (6,077 gallons) or less, and equipment used exclusively for the transfer to or from such storage of organic liquids.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(P) Equipment used exclusively for the storage and/or transfer of an asphalt-water emulsion heated to 150 °F or less.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(Q) Liquid fuel storage tanks piped exclusively to emergency internal combustion engine-generators, turbines or pump drivers.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(R) Bins used for temporary storage and transport of material with a capacity of 2,080 liters (550 gallons) or less.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(S) Equipment used for material storage where no venting occurs during filling or normal use.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(T) Equipment used exclusively for storage, blending, and/or transfer of water emulsion intermediates and products, including latex, with a VOC content of five percent by volume or less, or	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the

Sections	Changes Since 1981 SIP-Approval	Analysis
a VOC composite partial pressure of five mm Hg (0.1 psi) or less at 20 °C (68 °F).		equipment, the type of material used or the amount of material used.
(U) Equipment used exclusively for storage and/or transfer of sodium hypochlorite solution.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(V) Equipment used exclusively for the storage of VOC containing materials which are stored at a temperature at least 130 °C (234 °F) below its initial boiling point, or have an organic vapor pressure of five mm Hg (0.1 psia) absolute or less at the actual storage temperature. If the stored material is heated, the owner or operator shall install and maintain a device to measure the temperature of the stored VOC containing material to qualify for this exemption. This exemption does not include liquid fuel storage greater than 160,400 liters (40,000 gallons), asphalt storage, or coal tar pitch storage.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(W) Stationary equipment used exclusively to store and/or transfer organic compounds that do not contain VOCs.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(X) Unheated equipment including the associated control equipment used exclusively for the storage and transfer of fluorosilicic acid at a concentration of 30 percent or less by weight and a vapor pressure of 24 mm Hg or less at 77 °F (25 °C). The hydrofluoric acid concentration within the fluorosilicic acid solution shall not exceed one percent by weight.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(Y) Equipment, including asphalt day tankers, used exclusively for storing, holding, melting, and transferring asphalt or coal tar	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>pitch, that is mounted on a motor vehicle with a maximum holding capacity:</p> <p>(i) Less than 600 liters (159 gallons); or</p> <p>(ii) Less than or equal to 18,925 liters (5,000 gallons), provided the equipment in subparagraph (d)(13)(Y) is equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only.</p>		<p>limitations based on the size of the equipment, the type of material used or the amount of material used.</p>
<p>(Z) Tanks for aqueous urea solutions with a capacity of 6,500 gallons or less. This exemption does not include tanks used for blending powdered urea and water.</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>
<p>(AA) Replacement of a pole float used to control emissions from slotted guidepoles in floating roof storage tanks with a pole sleeve or a pole sleeve in combination with a flexible enclosure system. The exceptions provided in paragraph (e)(1) do not apply to equipment utilizing this provision for replacing equipment. In addition, this provision does not exempt such equipment from complying with any requirements or regulations listed in paragraph (e)(1), as those requirements may separately apply to the equipment.</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.</p>
<p>(14) Natural Gas and Crude Oil Production Equipment</p>	<p>Subdivision (o) now listed in paragraph (d)(14)</p>	
<p>(A) Well heads and well pumps.</p>	<p>Formerly in (o)(1)</p>	<p>No change from SIP-approved Rule 219.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
(B) Crude oil and natural gas pipeline transfer pumps.	Formerly in (o)(2)	No change from SIP-approved Rule 219.
(C) Gas, hydraulic, or pneumatic repressurizing equipment.	Formerly in (o)(3). Removed language stating that exemption does not apply to ICEs not exempt pursuant to this rule.	Removed ICE language, which is redundant with (d)(2)(A)(i).
(D) Equipment used exclusively as water boilers, water or hydrocarbon heaters, and/or closed heat transfer systems excluding steam generators used for oilfield steam injection, that:  (i) Have a maximum heat input rate of 2,000,000 Btu per hour or less; and  (ii) Are fired exclusively with Purchased Quality Natural Gas, liquefied petroleum gas, Produced Gas which contains less than 10 ppm hydrogen sulfide, or any combination thereof.	Formerly in (o)(4). Removed exemption for steam generators used for oilfield steam injection. Reduced maximum heat input rating from 20 million Btu/hr	Tightened exemption by removing exemption for the steam generators, and by reducing the maximum heat input rating, which harmonizes with (d)(2)(C).
(E) The following equipment used exclusively for Primary Recovery, and not associated with Community Lease Units:  (i) Gas separators and boots;	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(ii) Initial receiving, gas dehydrating, storage, washing and Shipping Tanks with an individual capacity of 34,069 liters (9,000 gallons) or less;	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.



Sections	Changes Since 1981 SIP-Approval	Analysis
(iii) Crude oil tank truck loading facilities (does not include a loading rack), and gas recovery systems exclusively serving tanks exempted under clause (d)(14)(E)(ii); or	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(iv) Produced Gas dehydrating equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(F) Gravity-type oil/water separators with a total air/liquid interfacial area of less than 45 square feet, separating oil with a specific gravity of 0.8251 or higher (40.0 API or lower).	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(15) Cleaning	New paragraph	
The exemptions in paragraph (d)(15) do not include any equipment or operations regulated under Rule 1122 – Solvent Degreasers using solvents that are greater than five percent by weight, or 0.01 percent by weight for non-Rule 1122 equipment or operations, of perchloroethylene, methylene chloride, carbon tetrachloride, chloroform, 1,1,1-trichloroethane, trichloroethylene, or any combination thereof, with either a capacity of more than 7.6 liters (2 gallons) or designed as a solvent cleaning and drying machine regardless of size. In addition, the exemptions specified in this subdivision apply only if the equipment is also exempt pursuant to subparagraph (d)(2)(C) or (d)(2)(D) of this rule.	Paragraph clarifies the cleaning equipment that are exempt pursuant to this subdivision. Specifically excludes equipment using solvents that contain greater than the specified percentage of listed TACs, that either exceed the size limit or designed as a cleaning and drying machine.	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(A) The following solvent cleaning equipment and associated waste storage tanks, used exclusively to store the solutions drained from this equipment:</p> <p>(i) Unheated batch, provided:</p> <p>(A) The volume of the solvent reservoir is one gallon or less; or</p> <p>(B) The VOC emissions from the equipment are not more than three pounds per day or 66 pounds per calendar month.</p> <p>(ii) Devices used for cleaning of equipment used for the application of inks, adhesives, and coatings provided:</p> <p>(A) The volume of the device’s solvent reservoir is five gallons or less; or</p> <p>(B) The VOC emissions from the equipment are not more than three pounds per day or 66 pounds per calendar month.</p> <p>(iii) Remote reservoir cleaners with a maximum sink opening area of seven square feet or less, provided the solvent from the sink-like area immediately drains into an enclosed solvent container while the parts are being cleaned.</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
<p>(B) Vapor degreasers with an air/vapor interface surface area of one square foot or less, provided such degreasers have an organic solvent loss of three gallons per day or less excluding water or 66 gallons per calendar month or less excluding water.</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
<p>(C) Cleaning equipment using materials with a VOC content of 25 Grams of VOC Per Liter of Material or less, and associated dryers exclusively serving these cleaners, provided such equipment is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D). This exemption does not include equipment used for cleaning diesel particulate filters (DPFs) or associated control</p>	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.

Sections	Changes Since 1981 SIP-Approval	Analysis
equipment used exclusively to vent equipment used for cleaning DPFs.		
(D) Hand application of solvents for cleaning purposes including but not limited to the use of rags, daubers, swabs, and squeeze bottles, and the associated air pollution control equipment used to exclusively vent such operations, unless the air pollution control equipment is required for source specific rule compliance.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(16) Miscellaneous Process Equipment	Subdivision (m) now listed in paragraph (d)(16)	
(A) Equipment, including dryers used exclusively for dyeing, stripping, or bleaching of textiles and the control equipment used exclusively to vent the equipment, provided:  (i) No VOC containing materials, including diluents or thinners, are used, and  (ii) The equipment is also exempt pursuant to subparagraphs (d)(2)(C) or (d)(2)(D).	Formerly in (l)(1). Added limitation that equipment is required to be exempt pursuant to the parameters of (d)(2)(C) or (d)(2)(D). Added control equipment to the exemption.	Tightens exemption by limiting equipment to the parameters of (d)(2)(C) or (d)(2)(D). Addition of control equipment does not increase emissions.
(B) Equipment used exclusively for bonding lining to brake shoes and the control equipment used exclusively to vent such equipment, provided no VOC containing materials are used.	Formerly in (m)(1). Added requirement that no VOC containing materials are used. Added control equipment to the exemption.	Tightens exemption by not allowing VOC containing materials. Addition of control equipment does not increase emissions.
(C) Equipment used exclusively to liquefy or separate oxygen, nitrogen, or the rare gases from air, provided such equipment is	Formerly in (m)(2). Added limitation that combustion equipment is	Tightens exemption by limiting equipment to the parameters of (d)(2)(A) through (d)(2)(D).

Sections	Changes Since 1981 SIP-Approval	Analysis
also exempt pursuant to subparagraphs (d)(2)(A), (d)(2)(B), (d)(2)(C), or (d)(2)(D).	required to be exempt pursuant to (d)(2)(A) through (d)(2)(D).	
<p>(D) Equipment used exclusively for surface preparation, including but not limited to paint stripping, pickling, desmutting, de-scaling, passivation, and/or deoxidation, and any water and associated rinse tanks and waste storage tanks used exclusively to store the solutions drained from the equipment, that exclusively uses any one or combination of the materials in clauses (d)(16)(D)(i) through (d)(16)(D)(viii). This exemption does not include any rectified, air sparged or heated tank that contains chromium, nickel, lead or cadmium. This exemption also does not include chemical milling or circuit board etching using ammonia-based etchants.</p> <p>(i) Organic materials containing 50 grams or less of VOC per liter of material;</p> <p>(ii) Formic acid, acetic acid, boric acid, citric acid, phosphoric acid, and sulfuric acids;</p> <p>(iii) Hydrochloric acid in concentrations of 12 percent by weight or less;</p> <p>(iv) Alkaline oxidizing agents;</p> <p>(v) Hydrogen peroxide;</p> <p>(vi) Salt solutions, except for air sparged, heated or rectified processes with salt solutions containing hexavalent chromium, chromates, dichromates, nickel, cadmium, or lead;</p> <p>(vii) Sodium hydroxide, provided the process is not sparged or rectified; or</p> <p>(viii) Nitric acid, hydrochloric acid, or hydrofluoric acid, provided that the equipment in which it is used has an open</p>	New	For clauses (i), (iii), and viii), see 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used. For other provisions, see 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.

Sections	Changes Since 1981 SIP-Approval	Analysis
surface area of one (1) square foot or less, is unheated, and produces no visible emissions.		

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(E) Equipment used exclusively for the plating, stripping, or anodizing of metals as described in clauses (d)(16)(E)(i) through (d)(16)(E)(vii). This exemption does not include any rectified, air sparged or heated tank that contains chromium, nickel, lead or cadmium.</p> <p>(i) Electrolytic plating of exclusively brass, bronze, copper, iron, tin, zinc, and precious metals;</p> <p>(ii) Electroless nickel plating, provided that the process is not air sparged or heated, and no electrolytic reverse plating occurs;</p> <p>(iii) The electrolytic stripping of brass, bronze, copper, iron, tin, zinc, and precious metals, provided no chromic, hydrochloric, nitric or sulfuric acid is used;</p> <p>(iv) The non-electrolytic stripping of metals, provided the stripping solution is not sparged and does not contain nitric acid.</p> <p>(v) Anodizing exclusively using sulfuric acid and/or boric acid with a total bath concentration of 20 percent acids or less by weight and using 10,000 amp-hours per day or less of electricity;</p> <p>(vi) Anodizing using exclusively phosphoric acid with a bath concentration of 15 percent or less phosphoric acid by weight and using 20,000 amp-hours per day or less of electricity; or</p> <p>(vii) Water and associated rinse tanks, and waste storage tanks used exclusively to store the solutions drained from equipment used for the plating, stripping, or anodizing of metals.</p>	<p>Formerly in (m)(4). Original exemption was a general exemption for electrolytic plating, electrolytic polishing or electrolytic stripping of brass, bronze, cadmium, copper, iron, lead, nickel, tin, zinc, and precious metals.</p>	<p>Current exemption is tightened considerably. General equipment category exemption is removed. Metal finishing of cadmium, lead, and nickel (metals that are TACs) are no longer exempt. Current exemptions are for equipment that have small amount of emissions. See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.</p> <p>For clause (v), see 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>
<p>(F) Closed loop solvent recovery systems used for recovery of waste solvent generated on-site using a refrigerated or liquid-cooled condenser, or an air-cooled condenser with a solvent reservoir capacity of less than 10 gallons.</p>	<p>New</p>	<p>See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.</p>

Sections	Changes Since 1981 SIP-Approval	Analysis
(G) Equipment used exclusively for manufacturing soap or detergent bars, including mixing tanks, roll mills, plodders, cutters, wrappers, where no heating, drying or chemical reactions occur.	Formerly in (m)(13)	No change from SIP-approved Rule 219.
(H) Inert gas generators, provided such equipment is also exempt pursuant to subparagraphs (d)(2)(C) and (d)(2)(D).	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(I) Hammermills used exclusively to process aluminum and/or tin cans, and the control equipment used exclusively to vent such equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(J) Paper shredding, and carpet and paper shearing, fabric brushing and sueding as well as associated conveying systems, baling equipment, and the control equipment used exclusively to vent such equipment. This exemption does not include carpet and fabric recycling operations.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(K) Chemical vapor type sterilization equipment where no ethylene oxide is used, and with a chamber volume of two cubic feet or less, used by healthcare facilities and the control equipment used exclusively to vent the equipment. This exemption does not include equipment used for incineration.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(L) Hot melt adhesive equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(M) Pyrotechnic equipment, special effects or fireworks paraphernalia equipment used for entertainment purposes,	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.

Sections	Changes Since 1981 SIP-Approval	Analysis
provided such equipment is also exempt pursuant to paragraph (d)(2).		
(N) Ammunition or explosive testing equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(O) Fire extinguishing equipment using halons.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(P) Industrial wastewater treatment equipment which only performs pH adjustment, precipitation, gravity separation and/or filtration of the wastewater, including equipment used for reducing hexavalent chromium and/or destroying cyanide compounds. This exemption does not include treatment processes where VOCs and/or toxic materials are emitted, or where the inlet concentration of cyanide salts through the wastewater treatment process prior to pH adjustment exceeds 200 mg/liter.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(Q) Rental equipment operated by a lessee and which is not located more than 12 consecutive months at any one facility in the South Coast AQMD provided the owner of the equipment has a permit to operate issued by the South Coast AQMD and that the lessee complies with the terms and conditions of the permit to operate.	New	Addresses an administrative matter. Clarifies that lessees of permitted rental equipment are not required to obtain their own permits if the requirements in this provision are met.
(R) Industrial wastewater evaporators treating water generated from on-site processes only, where no VOCs and/or toxic materials are emitted, provided the equipment is also exempt pursuant to subparagraphs (d)(2)(C) and (d)(2)(D).	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.



Sections	Changes Since 1981 SIP-Approval	Analysis
(S) Foam application equipment using two-component polyurethane foam and the control equipment used exclusively to vent this equipment provided the blowing agent does not contain VOCs, chlorofluorocarbons, or methylene chloride.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(T) Toner refilling and the associated control equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(U) Evaporators used at dry cleaning facilities to dispose of separator wastewater and the control equipment used exclusively to vent the equipment.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(V) Equipment used to recycle aerosol cans by puncturing the can in an enclosed system which is vented through an activated carbon filter. This exemption shall only apply to aerosol recycling systems where the aerosol can to be recycled was used as part of their operation at the facility or a facility under common ownership.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(W) Notwithstanding the exemptions in paragraph (d)(16), equipment existing as of May 5, 2017 that is subject to the aforementioned exemptions and that is an integral part of an operation requiring a written permit shall continue to be exempt, provided the equipment is identified, described in detail and submitted for inclusion into the permit equipment description with any associated application for Permit to Construct or Permit to Operate. Equipment described in this paragraph includes, but is not limited to rinse tanks, dye tanks and seal tanks that are part of a metal finishing operation, including but not limited to plating, anodizing and surface preparation.	New	This is an administrative provision that requires exempt miscellaneous process equipment that is integral to permitted equipment or processes be added to an existing permit, when the permit is required to be amended (e.g., a change in operating conditions). Intent of this provision is to clearly identify exempt equipment in permitted operations in order to avoid confusion.

Sections	Changes Since 1981 SIP-Approval	Analysis
(X) Negative air machines and associated HEPA filtration systems that are primarily used to remove asbestos-laden air from isolated work areas at residential or commercial abatement projects, where the air is passed to the HEPA filtration system.	New	See 110(l) analysis for subdivision (d), Category D. Equipment, operations, or processes with trivial emissions.
(17) Agricultural Sources	New subdivision	Beginning January 1, 2004, SB 700 was enacted, removing the state-wide permitting exemption for agricultural sources from state law, and authorizing the air pollution control districts to issue permits for agricultural sources and equipment as required. Subsequent amendments to Rule 219 included exemptions for specified agricultural sources and equipment that were deemed to have relatively lower emissions. Any potential additional emissions from these exemptions would be offset by the removal of the general exemption for agricultural sources and equipment.
(A) Notwithstanding the exemption under this subdivision, any internal combustion engines, or gasoline transfer and dispensing equipment purchased or modified after July 7, 2006 that are not exempt pursuant to subparagraphs (d)(2)(A), (d)(2)(H), and (d)(13)(I) of this rule shall be subject to permit requirements.	New	ICEs and gasoline transfer and dispensing equipment are subject to the requirements of Rule 1110.2 and Rule 461, which establishes BARCT requirements for this equipment, and have provisions to minimize emissions from gaseous- and liquid-fueled ICEs

Sections	Changes Since 1981 SIP-Approval	Analysis
		and gasoline transfer and dispensing equipment, respectively. Additionally, previous rulemaking activities estimated that a very small number of gasoline transfer and dispensing equipment would be subject to this exemption. Any potential additional emissions from this exemption would be offset by the removal of exemptions for equipment purchased or modified after July 7, 2006.
(B) Emergency internal combustion engines at agricultural sources.	New	The operations of emergency ICEs are limited to the operations defined by Rule 1470. Agricultural emergency ICEs are also subject to the provisions Rule 1110.2. Any potential emissions from this exemption are offset by the emissions reductions from equipment that are now subject to permits.
(C) Agricultural permit units at agricultural sources not subject to Title V with actual emissions less than the amounts listed in Table 1	New	Exemptions for agricultural sources are not applicable to Title V facilities. Pursuant to SB 700, agricultural operations above the identified thresholds are subject to permits. Any potential emissions from this exemption are offset by the emissions reductions from facilities that are now subject to permits.

Sections	Changes Since 1981 SIP-Approval	Analysis
(D) Orchard wind machines powered by an internal combustion engine with a manufacturer’s rating greater than 50 brake horsepower provided the engine is operated no more than 30 hours per calendar year.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(E) Orchard heaters approved by CARB to produce no more than one gram per minute of unconsumed solid carbonaceous material.	New	See 110(l) analysis for subdivision (d), Category E. Equipment or operations with limited emissions because of limitations based on the size of the equipment, the type of material used or the amount of material used.
(18) Registered Equipment	New paragraph	
(A) Any portable equipment, including any turbines qualified as military tactical support equipment under Health and Safety Code Section 41754 registered in accordance with the Statewide Portable Equipment Registration Program (PERP) adopted pursuant to California Health and Safety Code Sections 41750 et seq.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(B) PERP registered engines used in the Outer Continental Shelf (OCS) as defined in 40 CFR, Part 55, provided that: (i) The owner or operator notifies the Executive Officer; (ii) The equipment shall not reside at one location for more than 12 consecutive months; and (iii) Notwithstanding the exemption applicability under Health and Safety Code Section 2451, of the Statewide Portable Equipment Registration Program (PERP) for engines operating in the OCS, any owner or operator using this permit exemption	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.

Sections	Changes Since 1981 SIP-Approval	Analysis
shall comply with PERP and with California Air Resources Board -issued registration requirements.		
(C) PERP registered equipment operated at a RECLAIM Facility shall be classified as a Major Source, Large Source or Process Units in accordance with Rule 2011- Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (Sox) Emissions subdivisions (c) and (d) for SOx emissions and Rule 2012- Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions subdivisions (c), (d), and (e) for NOx emissions for purposes of determining the applicable requirements for Monitoring, Reporting and Recordkeeping (MRR). Use of RECLAIM MRR Protocols for Rule 219 equipment as specified in Rule 2011 (Rule 2011 Protocol, Appendix A, Chapter 3, Subsection F) and Rule 2012 (Rule 2012 Protocol, Appendix A, Chapter 4, Subsection F) is only allowed if the registered PERP equipment also qualifies for an exemption from permit requirements under a separate provision of this rule.	New	See 110(l) analysis for subdivision (d), Category C. Area-wide sources regulated under State or federal law.
(e) Exceptions	New subdivision that specifies instances where equipment that are listed in (d) are not exempt. Language from beginning of the SIP-approved version moved to this subdivision.	

Sections	Changes Since 1981 SIP-Approval	Analysis
Notwithstanding equipment identified in subdivision (d) of this rule, written permits are required pursuant to the provisions of paragraphs (e)(1), (e)(2), and (e)(4):	New	Clarification statement, no requirements.
(1) Equipment, process materials or air contaminants subject to: (A) Regulation IX – Standards of Performance for New Stationary Sources (NSPS), except for internal combustion engines with a manufacturer’s rating of 50 brake horsepower or less; or (B) Regulation X – National Emission Standards for Hazardous Air Pollutants (NESHAP - 40 CFR 61), except for internal combustion engines with a manufacturer’s rating of 50 brake horsepower or less; or (C) Emission limitation requirements of either the state Air Toxic Control Measure (ATCM) or NESHAP - 40 CFR 63.	(e)(1)(A) and (B) formerly stated in the beginning of the rule. Clarified that they do not apply to ICEs rated below 50 bhp, which are exempt from permitting pursuant to (d)(2)(A)(i). Added provision in (e)(1)(C).	Provision excludes equipment that are subject to NSPS, NESHAP, or an ATCM from permit exemptions.
(2) When the Executive Officer has determined that the provisions in subparagraphs (e)(2)(A) through (e)(2)(C) apply and written notification has been given to the owner or operator of the equipment, the equipment shall thereafter be subject to Rules 201 and 203 for non-RECLAIM sources, Rule 2006 for RECLAIM sources, and/or Regulation XXX – Title V Permits for facilities subject to Title V permitting requirements: (A) The risk from uncontrolled emissions will be greater than identified in subparagraph (d)(1)(A), or paragraphs (d)(2) or (d)(3) in Rule 1401; (B) The equipment may not operate in compliance with all applicable South Coast AQMD rules and regulations, including but not limited to Rule 402 – Nuisance; or	New	Provisions exclude from permit exemptions, equipment that exceed health risks limits, are not in compliance with South Coast AQMD rules, or is not maintained or operated appropriately and causes excess emissions.

Sections	Changes Since 1981 SIP-Approval	Analysis
<p>(C) The equipment or the air pollution control system venting the equipment has been modified, operated, or maintained in a manner that:</p> <p>(i) Is inconsistent with the applicable exemption under any provisions of this rule; or</p> <p>(ii) Results in otherwise preventable excess emissions that have been detected or observed by the Executive Officer.</p>		
<p>(3) If the Executive Officer determines the information to evaluate health risk is inadequate, or if additional information or review is required, upon written notification from the Executive Officer, the owner or operator shall, within 60 days of the written notification, submit (a) complete permit application(s) to demonstrate the equipment operates below the risk thresholds in subparagraph (e)(2)(A).</p>	New	Provision clarifies that South Coast AQMD may request information as needed to determine health risk.
<p>(4) Equipment or control equipment subject to permitting requirements pursuant to Regulation XIV - Toxics and Other Non-criteria Pollutants.</p>	New	Equipment subject to permitting requirements in South Coast AQMD's Regulation XIV are not exempt pursuant to Rule 219.
<p>(f) Recordkeeping</p>	New subdivision	
<p>(1) Any owner or operator claiming an exemption under any provision of this rule shall maintain documentation and/or calculations sufficient to demonstrate that the stated exemption provision, parameter, requirement or limitation applies. Documentation may include, as applicable, but not be limited to:</p>	New. SIP-approved version of Rule 219 did not list any recordkeeping requirements.	Recordkeeping requirements are inclusive of all applicable emission sources and enhances enforceability of Rule 219. This section does not include a relaxation of requirements.

Sections	Changes Since 1981 SIP-Approval	Analysis
(2) All documentations and/or records pursuant to paragraph (f)(1) shall be maintained onsite for three years and made available to the Executive Officer upon request.		
(g) Test Methods	New subdivision	
(1) All test methods used to verify the percentages, concentrations, vapor pressures, etc., shall be approved test methods as contained in South Coast AQMD’s Test Method Manual or any methods approved by the Executive Officer, the California Air Resources Board, and the United States Environmental Protection Agency (U.S. EPA).	New	Ensures that the composition and characteristics of materials and equipment used to validate an exemption are verified using approved test methods.
(2) In the absence of an approved method as identified in paragraph (g)(1), any owner or operator claiming an exemption using the VOC emission limits in subparagraphs (d)(8)(A), (d)(10)(M), (d)(12)(F), or (d)(12)(K) shall use VOC calculation procedures acceptable to the Executive Officer based on U.S. EPA guidance, including, but not limited to, calculation procedures using product formulation data.	New	Provides options for other test methods when none are approved for the specified exemptions.
(h) Compliance Dates	New subdivision	Administrative requirements. Sets timetable for specified instances in paragraphs (1) and (2) to apply for a permit when exemptions are no longer applicable. Does not increase emissions.



Sections	Changes Since 1981 SIP-Approval	Analysis
(1) The owner or operator of equipment previously not requiring a permit pursuant to Rule 219 shall comply with Rule 203 within one year from the date Rule 219 is amended to remove the exemption unless compliance is required before this time by written notification by the Executive Officer. Effective on or after July 11, 2003 for purpose of Rule 301(e), emissions from equipment that has been removed from an exemption shall be considered “permitted” beginning January 1 or July 1, whichever is sooner, after Rule 219 is amended to remove the exemption, even if an application has not been submitted to obtain a permit.	New	Administrative requirement
(2) Notwithstanding paragraph (h)(1), effective July 5, 2017, an owner or operator submitting an application for Permit to Construct or Permit to Operate pursuant to Rules 201 or 203 shall comply with subparagraphs (d)(5)(U) and (d)(16)(W).	New	Administrative requirement

## **APPENDIX B – RESPONSE TO COMMENTS**

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**PUBLIC COMMENTS AND RESPONSES**

**WRITTEN COMMENTS**

## **PUBLIC COMMENTS AND RESPONSES**

A Public Workshop was held for PAR 219 and PAR 222 on January 4, 2023. The following section is a summary of individual verbal comments, followed by South Coast AQMD staff responses. In addition to the public workshop verbal comments, staff received written comment letters specific to PAR 219 and PAR 222 during a public comment period that closed on January 18, 2023. Copies of comment letters received, and South Coast AQMD staff responses are provided following the below responses to individual Public Workshop verbal comments.

### *Verbal Public Workshop and Public Consultation Meeting Comments*

Comment 1: A grocery store client has submitted Rule 222 registrations for food ovens. Worst-case calculations estimate food oven VOC emissions at this grocery store chain are much lower than one pound per day. It is requested that grocery store food ovens be treated the same as food ovens in eating establishments (i.e., exempted under 219 and not subject to Rule 222 registrations).

Response: The 2013 amendments to Rule 219 included a clarification that food ovens were exempted from requirements to obtain permits provided they were rated under 2,000,000 Btu/hr, they were fired on natural gas, and VOC emissions from yeast fermentation are less than one pound per day. A 2017 amendment modified this provision to be more general to include VOC emissions from all sources, including VOC emissions from the baking process in addition to VOC emissions from yeast fermentation. The exemptions provided in Rule 219 for this equipment category is currently contingent upon meeting the filing requirements in Rule 222. PAR 219 removes the references to a Rule 219 exemption conditional upon a Rule 222 filing but PAR 222 does not change the filing requirements for food ovens that meet the thresholds identified in PAR 219 subparagraph (d)(2)(C). In response to stakeholder comments, PAR 222 subparagraph (d)(1)(G) recordkeeping provisions have been updated to indicate compliance with a daily emission limit for process VOC emissions for food ovens may be verified based on the calendar monthly emissions divided by 30.

Comment 2: It appears equipment previously not requiring a permit under Rule 219 must comply with South Coast AQMD regulations within one year from the date the equipment is subject to permits. Is submittal of a permit application sufficient to demonstrate compliance?

Response: As described in the preliminary draft staff report, submittal of a complete permit application within one year of the effective date of PAR 219 would comply with the compliance date established under paragraph (h)(1).

Comment 3: Efforts to establish additional permitting relief for facilities adding UV/EB/LED or other curing or drying technology in PAR 219 subparagraphs (d)(8)(H) and (d)(12)(L) are appreciated but the exemption requirements of clauses (d)(8)(H)(i) through (vi) and (d)(12)(L)(i) through (vi) are too restrictive. For example, changes to air flow should not be considered a permit modification.

Response: The exemption conditions included in clauses (d)(8)(H)(i) through (vi) and (d)(12)(L)(i) through (vi) are necessary to ensure that there is no increase in emissions associated with changes to equipment or processes. Adjustments to the air pollutant control equipment, including modifications to the air flow, need to be evaluated to ensure control devices continue to perform as designed when facilities have high VOC emission sources or when non-compliant coatings are used, and add-on controls are necessary. For example, any proposed changes to air flows such as those resulting to modifications to ducting systems require engineering evaluation to determine if

the control device operation will remain adequate to collect all emissions and if the existing add-on controls can accommodate any changes to total air flow rate.

Comment 4: PAR 219 and 222 include revisions that remove the option for a one-time submittal of a low VOC verification form in lieu of a Rule 222 registration. Removal of this streamlined compliance option is another burden for businesses.

Response: As described in the preliminary draft staff report, this one-time submittal to replace ongoing recordkeeping was specifically identified by U.S. EPA as an area that may impact Rule 219 SIP approval. Adequate recordkeeping requirements are essential to ensure Rule 219 could be approved into the SIP. As described in the preliminary draft staff report, one facility has submitted a low-VOC verification form since the provisions were added in 2017.

Comment 5: The current PAR 219 proposal would result in a requirement for a permit for UV/EB/LED operations that are part of operations that also have solvent systems. It is an unreasonable and environmentally adverse approach to attribute the emissions of a solvent system to an UV/EB/LED process with zero or near zero emissions simply because they are in the same facility.

Response: Existing Rule 219 and PAR 219 provisions apply to equipment, processes, or operations, not to a facility. An existing permitted facility that adds a stand-alone UV/EB/LED process with zero emission potential is not subject to additional permitting requirements. Addition of a UV/EB/LED system *into* a high-VOC process that uses add-on controls to comply with South Coast AQMD regulations are exempt from permitting requirements when certain criteria are met. These criteria are listed in PAR 219 to ensure emissions do not increase and add-on controls are meeting their intended efficiencies.

## WRITTEN COMMENTS

### *Letters Received*

1. Mainspring Energy (12/16/2022)
2. T-Mobile (1/4/2023)
3. Albertsons Companies, Inc. (1/6/2023)
4. Los Angeles Department of Water & Power (1/12/2023)
5. Hampford Research Inc (1/13/2023)
6. HCS (1/13/2023)
7. Saint Clair Systems (1/15/2023)
8. Heraeus Noblelight America LLC. (1/16/2023)
9. Keyland Polymer (1/16/2023)
10. Albertsons Companies, Inc. (1/18/2023)
11. Radtech (1/18/2023)
12. UV Specialties (1/18/2023)
13. Albertsons (1/25/2023)

**Comment Letter #1:****Mainspring Energy, submitted 12/16/22**

December 16, 2022

Michael Krause  
Assistant Deputy Executive Officer  
South Coast Air Quality Management District  
21865 Copley Dr.  
Diamond Bar, CA 91765

**MAINSRING ENERGY COMMENTS ON SCAQMD PROPOSED AMENDED RULE 219, EQUIPMENT NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II, AND PROPOSED AMENDED RULE 222, FILING REQUIREMENTS FOR SPECIFIC EMISSION SOURCES NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II**

Dear Mr. Krause:

Mainspring Energy, Inc. (Mainspring) appreciates the opportunity to participate in the Working Group Meetings (WGMs) for South Coast Air Quality Management District (SCAQMD or District) Proposed Amended Rule 219 (PAR 219), Equipment Not Requiring a Written Permit Pursuant to Regulation II, and Proposed Amended Rule 222 (PAR 222), Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II. This rulemaking is being undertaken to amend Rules 219 and 222 to address new technologies, an improved understanding of emission sources, and add clarifications.<sup>1</sup>

Mainspring Energy Inc. (Mainspring) was founded in 2010 by three Stanford University engineers seeking a new approach to generating clean, resilient, affordable electricity. Their research into high-efficiency methods of converting fuel into electricity led to the founding of the company and the development and productization of the World's first linear generator product. Mainspring's linear generator technology and products are designed and able to provide local power that is both efficient and low emitting, but also dispatchable to firm renewables and fuel flexible to transition to zero-carbon fuels such as hydrogen.

The California Air Resources Board (CARB) Distributed Generation (DG) Certification Regulation requires manufacturers of electrical generation technologies that are exempt from air district permit requirements to certify their technologies to specific criteria pollutant emission standards prior to selling the product.<sup>2</sup> Rule 219 (Equipment Not Requiring a Written Permit Pursuant to Regulation II) currently exempts microturbines and fuel cells from the requirement to have a SCAQMD permit to operate provided the product is subject to an Executive Order under the CARB DG Certification Regulation and a

<sup>1</sup> SCAQMD PAR 219 and PAR 222 WGM #1. Available at: <http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/219-222/par219-working-group-meeting-1-032522.pdf?sfvrsn=8>.

<sup>2</sup> CARB Distributed Generation Certification Regulation. Available at: [https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IFBEA1C805A2011EC8227000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IFBEA1C805A2011EC8227000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)).

filing (i.e., registration) has been submitted to SCAQMD under Rule 222 (Filing Requirements For Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II).

Mainspring’s linear generators are similar to fuel cells and microturbines in that they are all distributed generation technologies that have comparably low emissions. Linear generator technology is not currently referenced under R219 or R222. However, it is anticipated that certain linear generator models will soon be certified under the CARB Distributed Generation Certification Program. Mainspring believes that the appropriate R219 and R222 policy outcome for such linear generator products (subject to an Executive Order under the CARB DG Certification Regulation) is to be covered in the same manner as other DG technologies covered by a CARB DG certification.

For this reason, Mainspring respectfully requests that the SCAQMD consider the following rule language for addition under PAR 219 and PAR 222:

**PAR 219:**

***(d) Equipment, Processes, or Operations Not Requiring a Written Permit***

*[NEW SECTION]*

*(d)(2)(K): Linear generators provided that the equipment are certified with the state of California, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.*

**PAR 222:**

***(b) Applicability***

*[NEW ADDITION TO EXISTING TABLE I]*

<b><i>Table I</i></b>	
<b><i>Source/Equipment</i></b>	<b><i>Effective Date</i></b>
<i>Linear Generators, provided that the equipment is certified with the state of California.</i>	<i>DATE OF RULE ADOPTION</i>

***(c) Definitions***

*(#) LINEAR GENERATOR means any power generation technology using a thermochemical reaction to create linear motion that is directly converted into electricity.*

1-1

If you have questions regarding these comments, please contact me at (424) 241-8959 or [corrie.zupo@mainspring.com](mailto:corrie.zupo@mainspring.com) or our consultant, Scott Weaver of Ramboll US Consulting at (213) 943-6360 or [msweaver@ramboll.com](mailto:msweaver@ramboll.com).

Regards,

*Corrie Zupo*

**Corrie Zupo**  
Environmental Manager, Permitting and Compliance

Cc: Adam Simpson, Mainspring Energy (Menlo Park, CA)  
Scott Weaver, Ramboll US Consulting (Los Angeles, CA)

**Responses to Mainspring Energy Email Correspondence, submitted 12/16/22**

Response 1-1:           The South Coast AQMD appreciates the efforts of Mainspring Energy to develop low emission power generation technologies. Linear generators are currently subject to the permitting process that establishes operating conditions to limit emissions. To date, no linear generators have obtained the CARB Distributed Generation certification. There is limited emissions data available to support the requested exemption to written permits.



**Comment Letter #2:****T-Mobile, submitted 1/4/23**

**From:** Michael Blackwell <michael.blackwell@tmuspartners.com>  
**Sent on:** Wednesday, January 4, 2023 5:34:38 PM  
**To:** Michael Laybourn <MLaybourn@aqmd.gov>; Yunnies Osias <yosias@aqmd.gov>  
**CC:** Kalam Cheung <kcheung@aqmd.gov>  
**Subject:** RE: Proposed Amendment to Rule 219  
**Urgent:** High

Hello Michael and Yunnies,

Thanks for a great presentation today. As per my voice message (to Michael), I am interested in pursuing further discussion on potential exemption for our diesel generators that have been certified by the EPA but exceed the 50 bhp horsepower threshold. As you are aware, T-Mobile provides service throughout the United States including California.

Today's discussion raises a question regarding the applicability of permit requirement for EPA certified generators that are used only during times of emergency. Currently AQMD standards require a permit for generators greater than 50 bhp. Generators less than 50 bhp are exempt from permitting. So we are really talking about the differential of 14.3 bhp that triggers the permit requirement.

As an FCC licensee, a wireless service provider must have means to continue operations during times of emergency/power outages when our E911 protocols are necessary. As such these stand-by generators are necessary to ensure that our communications systems will remain operable. In most cases we operate/test periodically. As such, the duration and frequency of use is rare. In fact testing duration and frequency can be scheduled according to what AQMD determines to be safe e.g., once every quarter for 15-30 minutes. In other words, outside of emergency situations, the stand-by generators would only run 1-2 hours per year.

I would like to discuss the potential of creating exemption language that could address operational exemptions for the stand-by engines that we use. As mentioned perhaps conditional exemptions would apply. As presented by Yunnies today, paragraph (e)(3) discusses a requirement to submit documentation to determine health risk. If found to be exempt based on the infrequency of use, the engine could be deemed exempt from permitting. Of course, if the Executive Officer determines that there is or maybe be a violation of the conditional exemption, a complete permit application would be required within a specified time frame e.g., 60 days.

Please let me know when you can be available for a brief phone call or Zoom meeting to discuss a work forward plans that allows us to meet the January 18<sup>th</sup> deadline.

Thank you,

Michael Blackwell  
 Direct (714) 396-8227 | [michael.blackwell@tmuspartners.com](mailto:michael.blackwell@tmuspartners.com)

2-1

**Responses to T-Mobile Email Correspondence, submitted 1/4/23**

Response 2-1: Rule 219 currently includes an exemption from permits for internal combustion engines (ICE) that are 50 brake horsepower or less. Permits for engines greater than 50 brake horsepower is a long-standing requirement that applies to all sources including essential services (police, fire, etc.) and to health care facilities. To streamline the permitting process, the South Coast AQMD has developed a list of ICEs that have previously been analyzed and have been certified as meeting the applicable emissions thresholds. Facilities submitting permit applications for ICEs already on the South Coast AQMD certified equipment list are processed expeditiously.

**Comment Letter #3:****Albertsons Companies, Inc, submitted 1/6/23**

January 6, 2023

Mike Krause  
 Assistant Deputy Executive Officer, Planning, Rule Development and Implementation  
 South Coast Air Quality Management District  
 Phone: (909) 396-2706  
 E-mail: MKrause@aqmd.gov

**Subject: Comments on PAR 219 & 222 for Albertsons Companies, Inc.**

Dear Mr. Krause:

Albertsons Companies, Inc. (Albertsons) is working with Yorke Engineering (Yorke) to provide these comments to the South Coast Air Quality Management District (SCAQMD) on SCAQMD's Proposed Amended Rule (PAR) 219 and 222. Albertsons and Yorke attended SCACQMD's Public Workshop on January 4, 2023 and provided verbal comments. We are submitting these written comments to supplement our verbal comments. Once you have reviewed this letter, we request a meeting with your staff to discuss it in more detail. We appreciate Yunnie Osias for already reaching out to us to schedule a meeting.

Albertsons operates approximately 256 bakery ovens at 198 grocery stores under SCAQMD jurisdiction. The ovens are used to bake products that are manufactured and frozen at another facility. Albertsons evaluated their products and equipment to estimate the process volatile organic compound (VOC) emissions from each oven, and even the most conservative assumptions found that daily VOC emissions were a fraction of a pound per day. Thus, the ovens qualify for exemption from permitting under Rule 219(b)(2) [PAR 219(d)(2)(C)(iii)]. Albertsons submitted Rule 222 registrations for their bakery ovens after they became aware of the requirement. The SCAQMD issued Rule 222 filings in May 2022 which impose "operating parameters" that require daily records for each oven to show that the equipment emits less than one pound per day of process VOC emissions. This is overly burdensome and provides no benefit to air quality.

Eating establishments are exempt from these rules under PAR 219(d)(9) and PAR 222(b)(1). Albertsons proposes that grocery stores – which also prepare food for human consumption – should be considered eating establishments and exempt from the requirement to obtain a stationary source permit and exempt from the requirement to be registered, in light of the fact that daily emissions from these ovens do not even come close to the permitting threshold. Excluding grocery stores like other eating establishments makes sense considering the type of operations at these facilities.

If SCAQMD does not include grocery stores in the definition of eating establishments, Albertsons would propose the rule language be revised to provide for more reasonable requirements for recordkeeping, such as calculating average daily emissions based on annual production. Rule 1153 provides an example. Rule 1153 is not applicable to the ovens operated at Albertson stores since they are rated <2 MMBtu/hour.

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3-1



However, the rule includes VOC emission calculation methodology based on yeast percentage and fermentation time. Average daily emissions are calculated from the total calendar year emissions (tons/year) divided by the number of days the oven was employed for production during that year. This approach would be less burdensome.

3-1  
(cont.)

**PROPOSED RULE LANGUAGE**

Albertsons proposes the following rule language amendments so that grocery stores are treated the same as eating establishments. Additions are indicated in **bold underline**.

**PAR 219**

We propose amending Rule 219 to include grocery stores with eating establishments in the permit exemption:

- (d)(9) Pharmaceuticals, Cosmetics, and Food Processing and Preparation Equipment*
- (E) Equipment used in eating establishments **and grocery stores** for the purpose of preparing food for human consumption.*

**PAR 222**

Rule 222 should be amended for consistency with Rule 219. One option is to amend the applicability section:

3-2

- (b) Applicability*
- (1) Food Ovens, excluding equipment used in eating establishments **and grocery stores** for the purpose of preparing food for human consumption, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas, and where the process VOC emissions are less than one pound per day, exempt from a written permit pursuant to Rule 219 (d)(2)(C)(b)(2).*

Another option is to amend the definition of Food Ovens:

- (c) Definitions*
- (12) FOOD OVEN is any equipment used exclusively for food preparation, **excluding equipment used in eating establishments and grocery stores for the purpose of preparing food for human consumption**, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, and is fired exclusively on natural gas, and where the process VOC emissions are less than one pound per day.*

**VOC Recordkeeping Requirement**

If the SCAQMD does not include grocery stores with eating establishments to exempt them from permitting and from any VOC recordkeeping, Albertsons requests simplification of the recordkeeping requirement.

3-3

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One option is to amend PAR 219(f) – Recordkeeping

(1) Any owner claiming an exemption under any provision of this rule shall maintain documentation and/or calculations sufficient to demonstrate that the stated exemption provision, parameter, requirement, or limitation applies. Documentation may include, but not be limited to:

- a. For food ovens exempt under 219(d)(2)(C), annual throughput quantities to calculate the average daily VOC emissions based on annual production.

The recordkeeping requirements listed as operating parameters on the Rule 222 filings/registrations can be revised:

5. This equipment shall emit less than one pound per day of process volatile organic compounds (VOC) emissions calculated annually as the average daily emissions using annual production quantities.

6. The operator shall maintain records in a format approved by the Executive Office to verify compliance with operating parameter #5. The records shall be retained on premises for at least three years and shall be made available to any South Coast AQMD representative upon request.

3-3  
(cont.)

## CONCLUSION

Albertsons appreciates your consideration of these comments and requests that the SCAQMD consider the burden on grocery stores, which provide essential products for the community. We look forward to our meeting with SCAQMD staff for a more detailed discussion.

Sincerely,

Sarah Kelsay  
Project Manager; Environmental, Risk and Compliance  
Albertsons Companies, Inc  
(551) 265-0998  
[Sarah.kelsay@albertsons.com](mailto:Sarah.kelsay@albertsons.com)

cc: Yunnie Osias, SCAQMD  
Mike Laybourn, SCAQMD  
Kalam Cheung, SCAQMD  
Jane Anderson, Albertsons  
Judy Yorke, Yorke Engineering  
Peter Moore, Yorke Engineering  
Joseph Steirer, Yorke Engineering  
Jameson Edwards, Yorke Engineering

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**Responses to Albertsons Companies, Inc, Email Correspondence, submitted 1/6/23**

- Response 3-1: A clarification has been added to the staff report that eating establishments do not include facilities where food is prepared and packaged for subsequent sale, such as retail stores. In response to stakeholder recordkeeping comments, staff has updated the provisions in PAR 222 with additional recordkeeping options for food ovens and for equipment with a low potential to emit. See the response to comment 3-3 for the detailed proposal.
- Response 3-2: The 2013 amendments to Rule 219 included a clarification that food ovens were exempt from requirements to obtain permits provided they were rated under 2,000,000 Btu/hr, were fired on natural gas, and where VOC emissions from yeast fermentation are less than one pound per day. A 2017 amendment modified this provision to be more general to include VOC emissions from all sources, including VOC emissions from the baking process in addition to VOC emissions from yeast fermentation. The exemptions provided in Rule 219 for this equipment category is contingent upon meeting the registration requirements in Rule 222. As previously mentioned, PAR 219 removes filing of a Rule 222 registration as a prerequisite for a Rule 219 exemption from permits but under existing Rule 222 and PAR 222, food ovens that meet the thresholds identified in PAR 219 clause (d)(2)(C)(iii) remain subject to a Rule 222 filing. A clarification has been added to the staff report that eating establishments do not include facilities where food is prepared and packaged for subsequent sale, such as retail stores.
- Response 3-3: Existing recordkeeping provisions in Rule 222 subparagraph (d)(1)(G) require facilities to maintain records sufficient to verify the description of the emission sources or equipment, data necessary to estimate output of emissions sources, and records used to demonstrate compliance with operating conditions. In the case for food ovens, records are required to verify that the process VOC emissions are below one pound per day. In response to stakeholder comments, PAR 222 subparagraph (d)(1)(G) recordkeeping provisions have been updated to indicate compliance with a daily emission limit for process VOC emissions for food ovens may be verified based on the calendar monthly emissions divided by 30. Additionally, the staff report clarifies that equipment with low process VOC emissions may choose to demonstrate compliance with the daily limit by calculating the maximum potential to emit assuming full operations, including 24 hours of operating hours and maximum loading/throughput. If the equipment's maximum potential to emit is below the daily limit, a daily operation log is not required but an annual record such as production and purchase record is needed to verify these parameters, and thus compliance. See Requirements [subdivision (d)] on page 3-4 of the staff report for a more detailed discussion.

**Comment Letter #4:**

**Los Angeles Department of Water & Power, submitted 1/12/23**



Karen Bass, Mayor  
Board of Commissioners  
Cynthia McClain-Hill, President  
Cynthia M. Ruiz, Vice President  
Mia Lehrer  
Nicole Neeman Brady  
Nurit Katz  
Chante L. Mitchell, Secretary

Martin L. Adams, General Manager and Chief Engineer

January 12, 2023

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

Dear Mr. Krause:

Subject: Support for new Gas-insulated Equipment provision in Proposed Amended Rule 219

The Los Angeles Department of Water and Power (LADWP) supports the new exemption for Gas-Insulated Equipment in Proposed Amended Rule 219.

For decades, electrical circuit breakers and switches insulated with Sulfur-Hexafluoride (SF6) gas have been used in the electricity generation, transmission and distribution system. SF6 gas is an insulating medium contained within the interrupter compartment of the circuit breaker for the purpose of quenching electrical arcs. In 2020/2021, the California Air Resources Board adopted a regulation that gradually phases out the use of SF6 in electricity transmission and distribution equipment starting in 2025 because SF6 is a greenhouse gas with a high global warming potential. In response, electrical equipment manufacturers are developing and testing equipment utilizing alternative gas mixtures that have dielectric properties similar to SF6 but with a lower global warming potential. The new exemption in Rule 219 (d)(4)(M) will facilitate the installation of alternative gas-insulated equipment within the electricity generation, transmission and distribution system as a substitute for SF6 by ensuring these alternative gas-insulated circuit breakers and switches will not require a permit-to-operate.

4-1

LADWP appreciates South Coast Air Quality Management District’s consideration and inclusion of exemption (d)(4)(M) for Gas-Insulated Equipment in Proposed Amended Rule 219. If you have any questions, please contact Ms. Cindy Parsons of my staff at (213) 367-0636.

Sincerely,

Katherine Rubin

Digitally signed by  
Katherine Rubin  
Date: 2023.01.17  
17:39:54 -08'00'

Katherine Rubin  
Director of Environmental Affairs  
CP:cb

c: Ms. Kalam Cheung  
Ms. Yunnie Osias  
Mr. Mike Laybourn

**Responses to Los Angeles Department of Water & Power Email Correspondence,  
submitted 1/12/23**

Response 4-1:            Thank you for the participation in the public process and the support for  
PAR 219.



**Comment Letter #5:****Hampford Research Inc, submitted 1/13/23**

January 13, 2023

Mr. Wayne Nastri

Executive Officer

South Coast Air Quality Management District Wnastri@aqmd.gov

Re: Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear Mr. Nastri:

Hampford Research Inc is a global supplier of specialty chemicals serving the UV/EB industry for over 35 years. We welcome the opportunity to comment on the proposed amendments to Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II. We very much appreciate the direction your board has given to staff to amend the rule in order to accommodate some of the latest innovations in our industry. While we appreciate staff's efforts, the current proposal does not take into consideration issues facing the businesses we represent. The current rule treats all coating processes alike regardless of their environmental benefit. UV/EB/LED processes are not formulated with Volatile Organic Compounds (VOCs) or toxics air contaminants. Conversion away from solvent processes benefits the District and your Board has provided incentives in the form of regulatory flexibility through permit exemptions in Rule 219.

According to staff, the current rule language requires a permit for UV/EB/LED operations that are part of operations that also have solvent systems. It is unfair to attribute the emissions of a solvent system to a UV/EB/LED process with zero or near zero emissions simply because they are located in the same facility. This approach discourages facilities who are exploring conversion to UV/EB/LED but are unable to convert the entire facility. Businesses who are willing to invest in clean technologies should be encouraged to do so and saddling with added permit costs will be counterproductive to the District's mission.

5-1

The staff proposal to require permits whenever facilities change ducting in order to change air flow, is especially troublesome. We hope we can continue to work with staff to add language that would remedy the harm being done to businesses in the South Coast who are looking to partially convert to UV/EB/LED processes.

5-2

Sincerely,

Kate Donahue, President/CEO

**Responses to Hampford Research Inc Email Correspondence, submitted 1/13/23**

Response 5-1: Existing Rule 219 and PAR 219 provisions apply to equipment, processes, or operations, not to a facility. An existing permitted facility that adds a stand-alone UV/EB/LED process with zero emission potential is not subject to permitting requirements for that process. An existing permitted facility could separately install a traditional lower-emitting UV coating operation that may be below PAR 219 usage thresholds (e.g., clause (d)(8)(A)(iii)) without triggering permit requirements. Addition of a UV/EB/LED system *into* a high-VOC process that uses add-on controls to comply with South Coast AQMD regulations are exempt from permitting requirements when certain criteria are met. These criteria are listed in PAR 219 to ensure emissions do not increase and the add-on controls continue to perform at its intended efficiencies.

Response 5-2: The exemption conditions included in clauses (d)(8)(H)(i) through (vi) and (d)(12)(L)(i) through (vi) are necessary to ensure that there is not an increase in emissions associated with changes to equipment or processes. Evaluation of any modifications to the air flow is necessary to ensure continued control device performance when equipment or processes have high VOC emission sources or when non-compliant coatings are used, and add-on controls are necessary. For example, engineering evaluations are necessary to determine if either existing exhaust fan(s) are appropriately sized to provide adequate air flows throughout the modified ducting system or increased air flows exceed the capacity of the control device to which they are vented. This can be illustrated by the familiar case of a vacuum cleaner with a wand attachment. The vacuum's motor and fan are sized to provide an appropriate amount of suction when the vacuum is used as intended. Anyone who has put their hand over the end of the wand attachment knows that it provides powerful suction so it can perform its job. But if the user decides to modify the manufacturer's design such that the hose branches to accommodate a second wand, the amount of suction at each wand will be half of that available at the single wand in the unmodified design. The same thing happens if additional pickup points are added to an existing air pollution control system's ducting—the amount of suction available at each point is reduced and may not be adequate to capture the VOC emissions. If the facility compensates by installing a more powerful blower to increase the suction at each pickup point, the facility runs the risk of supplying the air pollution control device to which it vents with a greater flow rate than it can handle. Either scenario would result in the unintended consequence of reduced performance of the air pollution control system overall and increased emissions. In summary, applications and engineering

evaluations are necessary to ensure that ducting changes do not result in emissions increases.

**Comment Letter #6:****HCS, LLC, submitted 1/13/23**January 14<sup>th</sup>. 2023

Mr. Wayne Nastri  
Executive Officer  
South Coast Air Quality Management District  
[Wnastri@aqmd.gov](mailto:Wnastri@aqmd.gov)

Re: Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear Mr. Nastri:

HCS.LLC. is involved in the supply of environmentally proactive manufacturing processes such as UV curing/photopolymerization. We welcome the opportunity to comment on the proposed amendments to Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II. We very much appreciate the direction your board has given to staff to amend the rule in order to accommodate some of the latest innovations in our industry. While we appreciate staff’s efforts, the current proposal does not take into consideration issues facing the businesses we serve. The current rule treats all coating processes alike regardless of their environmental benefit. UV/EB/LED processes are not formulated with Volatile Organic Compounds (VOCs) or toxics air contaminants. Conversion away from solvent processes benefits the District and your Board has provided incentives in the form of regulatory flexibility through permit exemptions in Rule 219.

6-1

According to staff, the current rule language requires a permit for UV/EB/LED operations that are part of operations that also have solvent systems. It is an unreasonable and environmentally adverse approach to attribute the emissions of a solvent system to a UV/EB/LED process with zero or near zero emissions simply because they are located in the same facility. This approach discourages facilities who are exploring conversion to UV/EB/LED, based on their desire to be more environmentally proactive, but are unable to convert the entire facility. Businesses who are willing to invest in clean technologies, that reduce carbon-based footprints, should be encouraged, not actively discouraged, to do so. Burdening them with added permit costs will be counterproductive to the District’s mission and to all those entities that concerned about global warming and the environmental welfare of our planet.

The staff proposal to require permits whenever facilities change ducting, in order to change air flow, is especially troublesome. We hope we can continue to work with staff to add language that would remedy the harm being done to businesses, and the environment in the South Coast who are looking to partially convert to UV/EB/LED processes.

6-2

Sincerely,

Andrew D Harbourne, CEO.

HCS.LLC

**Responses to HCS Email Correspondence, submitted 1/13/23**

Response 6-1: Please refer to response to comment 5-1.

Response 6-2: Please refer to response to comment 5-2.

**Comment Letter #7:****Saint Clair Systems, submitted 1/15/23**

January 15, 2023

Mr. Wayne Nastri  
 Executive Officer  
 South Coast Air Quality Management District  
[Wnastri@aqmd.gov](mailto:Wnastri@aqmd.gov)

Re: Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear Mr. Nastri:

Saint Clair Systems is the leader in temperature and viscosity control for fluid dispensing systems. This includes the application of paints and coatings, sealers and adhesives, pottings and encapsulants, and printing inks just to name a few. Many of our customers have locations in California that have installed our systems both to improve their quality and to reduce their use of VOCs in their processes.

Because one of our primary business objectives is to reduce our customer's environmental impact, we welcome the opportunity to comment on the proposed amendments to Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II. We very much appreciate the direction your board has given to staff to amend the rule to accommodate some of the latest innovations in our industry. While we appreciate the staff's efforts, the current proposal does not take into consideration issues facing the businesses we represent. The current rule treats all coating processes alike regardless of their environmental benefit. UV/EB/LED processes are not formulated with Volatile Organic Compounds (VOCs) or toxics air contaminants. As a result, UV/EB/LED processes simply do not generate VOCs so there is no need to collect and remediate them. This is a proactive approach to pollution control.

The mandate of the SCAQMD is to reduce the release of hazardous pollutants into the air. Therefore, conversion away from processes that utilize solvents benefits the District and your Board has provided incentives in the form of regulatory flexibility through permit exemptions in Rule 219.

According to staff, the current rule language requires a permit for UV/EB/LED operations that are part of operations that also have solvent systems. It is unfair to attribute the emissions of a solvent system to a UV/EB/LED process with zero or near zero emissions simply because they are located in the same facility. This approach discourages facilities who are exploring conversion to UV/EB/LED but are unable to convert the entire facility. Businesses who are willing to invest in clean technologies should be encouraged to do so and saddling them with added permit costs will be counterproductive to the District's mission.

12427 31 Mile Road • Washington Township, Michigan • 48095  
 586.336.0700 • [www.saintclairsystems.com](http://www.saintclairsystems.com)

7-1

The staff proposal to require permits whenever facilities change ducting in order to change air flow, is especially troublesome. We hope we can continue to work with staff to add language that would remedy the harm being done to businesses in the South Coast who are looking to convert to UV/EB/LED processes to reduce their environmental impact.

Sincerely,

Saint Clair Systems, Inc.



Michael R. Bonner  
Vice President – Engineering & Technology

7-2

**Responses to Saint Clair Systems Email Correspondence, submitted 1/15/23**

Response 7-1: Please refer to response to comment 5-1.

Response 7-2: Please refer to response to comment 5-2.

**Comment Letter #8:**

**Heraeus Noblelight America LLC., submitted 1/16/23**

January 16, 2023

Mr. Wayne Natri  
Executive Officer  
South Coast Air Quality Management District  
[Wnatri@aqmd.gov](mailto:Wnatri@aqmd.gov)

Re: Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear Mr. Natri:

Heraeus Noblelight America LLC. is involved in supplying efficient and environmentally responsible energy-curing solutions in Southern California. We welcome the opportunity to comment on the proposed amendments to Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II. We appreciate the direction your board has given staff to amend the rule to accommodate some of the latest innovations in our industry. While we acknowledge your efforts, the current proposal does not consider issues facing the businesses we represent.

The current rule treats all coating processes alike, regardless of their environmental impact. Unlike traditional solvent-based technologies, UV/EB/LED chemistries are not formulated with Volatile Organic Compounds (VOCs) or toxic air contaminants. Adoption of this technology and moving away from solvent processes benefits the District, and in the past your Board has provided incentives in the form of regulatory flexibility through permit exemptions in Rule 219.

According to staff, the current rule language requires a permit for UV/EB/LED operations that are part of operations which also have solvent systems. We believe that it is unfair to associate the emissions of a solvent-based system with a UV/EB/LED process which has zero or near zero emissions simply because they are in the same facility. This approach discourages facilities that are exploring conversion to UV/EB/LED but are unable to convert their entire facility. Businesses that are willing to invest in clean technologies should be encouraged to do so and saddling these businesses with added permit costs will be counterproductive to the District’s mission.

8-1

The staff proposal to require permits whenever facilities change ducting to alter airflow is especially troublesome. We hope to continue working with staff to add language that would remedy the harm done to businesses on the South Coast that are looking to partially convert to environmentally responsible UV/EB/LED processes.

8-2

Sincerely,

James Bradley McMahon,

Site Manager – Heraeus Noblelight America LLC.



**Responses to Heraeus Noblelight America LLC. Email Correspondence, submitted 1/16/23**

Response 8-1: Please refer to response to comment 5-1

Response 8-2: Please refer to response to comment 5-2

**Comment Letter #9:**

**Keyland Polymer, submitted 1/16/23**



Keyland Polymer Material Sciences, LLC  
4641 Hinckley Industrial Parkway  
Cleveland, OH 44109  
216-216-741-7191 www.keylandpolymer.com

January 16, 2023

South Coast Air Quality Management District

Re: Public Comments -- Proposed Amended Rule 219 -- Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear SCAQMD Board Members:

Keyland Polymer Material Sciences, LLC is involved in the development, manufacturing, and application of UV/EB/LED cured solid materials, resins, and powder coatings. We don't currently have customers in California, but have several active projects, developing UV/EB/UVLED cured products and system applications for customers located in California. We welcome the opportunity to comment on the proposed amendment to Rule 219 -- Equipment Not Requiring a Written Permit Pursuant to Regulation II. Unfortunately, our company cannot support the current proposal as it does not take into consideration issues facing the businesses we represent. The current rule treats all coating processes alike regardless of their environmental benefit. UV/EB/UVLED processes are not formulated with Volatile Organic Compounds (VOCs) or toxic air contaminants. Keyland's products are 100% solid materials and do not contain solvents or water. Conversion away from solvent processes benefits the District and your Board has provided incentives in the form of regulatory flexibility through permit exemptions in Rule 219.

According to staff, the current rule language requires a permit for UV/EB/LED operations that are part of operations that also have solvent systems. It is unfair to attribute the emissions of a solvent system to a UV/EB/LED process with zero or near zero emissions simply because they are in the same facility. This approach discourages businesses who are exploring conversion to UV/EB/LED but are unable to convert the entire facility. Businesses who are willing to invest in clean technologies should be encouraged to do so and saddling them with added permit costs will be counterproductive to the District's mission.

We cannot support the proposed rule amendment, as it does not acknowledge the environmental and air quality benefits of our industry. We ask the Board request that staff add language that would remedy the harm this change will cause businesses in the South Coast who are looking to partially convert to UV/EB/LED processes.

Sincerely,

Michael F. Knoblauch

President

9-1



**Responses to Keyland Polymer Email Correspondence, submitted 1/16/23**

Response 9-1:           Please refer to response to comment 5-1.

**Comment Letter #10:**

**Albertsons Companies Inc, submitted 1/18/23**



January 18, 2023

South Coast Air Quality Management District Stationary Source Committee

Cities of Riverside County Representative Ben J. Benoit, Chair  
Senator (Ret.) Vanessa Delgado  
Supervisor Holly J. Mitchell  
Board Member Veronica Padilla-Campos  
Mayor Rex Richardson  
Supervisor Janice Rutherford

**Subject: Treat Grocery Stores as Eating Establishments for Bakery Oven Rule 219 and 222 Permit Exemption**

Honorable Members of the Stationary Source Committee:

Albertsons Companies, Inc. operates 198 grocery stores under the jurisdiction of SCAQMD providing essential products to the community. Each store operates one or two bakery ovens like those used in restaurants. The ovens range in size from 90,000 – 350,000 BTU per hour. The ovens are exempt from permitting under SCAQMD Rule 219, but under the current rules, subject to the requirement to keep daily production records for each oven. This daily recordkeeping requirement is overly burdensome and provides no benefit to air quality in light of the de minimis emissions from these ovens. The SCAQMD can easily provide relief by amending Rules 219 and 222 to treat grocery stores as “eating establishments,” which are already excluded from the registration and recordkeeping requirement. Grocery store ovens are similar in size to those used in restaurants, and many stores have dining areas where customers consume fresh products.

Pursuant to the current rules, Albertsons filed Rule 222 registrations for 256 bakery ovens at their grocery stores under SCAQMD jurisdiction. The ovens provide fresh-baked products for their store shelves and onsite deli. Most baked products are produced and frozen at another large production facility and shipped to the stores where they are heated in an oven. The SCAQMD issued Rule 222 registrations for the ovens, which impose “operating parameters” that require daily records of the VOC emissions from each oven to show that they continue to qualify for the permit exemption of less than one pound per day.

Albertsons evaluated their daily store bakery production levels during a busy week and calculated that daily process volatile organic compound (VOC) emissions were a fraction of a pound per day, demonstrating that the ovens clearly qualify for exemption from permitting under Rule 219.<sup>1</sup> Due to the de minimis emissions from these ovens, even accounting for conservative estimates during a busy week, daily recordkeeping as required by Rule 222 is unnecessary. Grocery store ovens are typically operated

<sup>1</sup> Rule 219(b)(2) [PAR 219(d)(2)(C)(iii)].

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10-1



by staff for a few hours a day to stock the shelves with fresh baked goods (for immediate consumption). The amount of product baked in each oven is not recorded by the operator and would take time away from their normal job duties without any attendant air quality benefit. Each store bakes a wide variety of items to stock what is needed for the day. Albertsons tracks product shipment and sales at the store level; not per oven.

10-1  
(cont.)

Albertsons provided verbal comments at the Public Workshop for Proposed Amended Rules 219 and 222 on January 4, 2023 and submitted a letter to SCAQMD staff outlining our concerns and requesting changes to these rules to address the concerns above. Albertsons met with SCAQMD staff on January 10 to discuss the proposed rule amendments and seek relief from daily recordkeeping requirements for each bakery oven. The staff responded on January 13 and offered to amend the rules to allow monthly recordkeeping instead of daily. We appreciate the positive response from the staff. However, we are appealing to the Stationary Source Committee to consider excluding grocery store ovens from Rule 222, due to their similarity to eating establishments, which are already excluded.

Eating establishments are exempt from these rules under PAR 219(d)(9) and PAR 222(b)(1). Albertsons proposes that grocery stores – which also prepare food for human consumption – be considered eating establishments and exempt from the requirement to be registered. Daily emissions from grocery store ovens are a fraction of the permitting threshold. Classifying grocery stores as eating establishments is consistent with the exclusion for eating establishments due to the similarity of operations at these facilities. Ongoing recordkeeping is an unnecessary burden and provides no benefit to air quality.

**PROPOSED RULE LANGUAGE**

Albertsons proposes the following rule language amendments so that grocery stores are treated the same as eating establishments. Additions are indicated in **bold underline**.

10-2

**PAR 219**

Amend Rule 219 to include grocery stores with eating establishments in the permit exemption:  
*(d)(9) Pharmaceuticals, Cosmetics, and Food Processing and Preparation Equipment*  
*(E) Equipment used in eating establishments **and grocery stores** for the purpose of preparing food for human consumption.*

**PAR 222**

Amend Rule 222 for consistency with Rule 219. Amend the applicability section:  
*(b) Applicability*  
*(1) Food Ovens, excluding equipment used in eating establishments **and grocery stores** for the purpose of preparing food for human consumption, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas, and where the process VOC emissions are less than one pound per day, exempt from a written permit pursuant to Rule 219 (d)(2)(C)(b)(2).*

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And amend the definition of Food Ovens:

(c) Definitions

(12) FOOD OVEN is any equipment used exclusively for food preparation, excluding equipment used in eating establishments and grocery stores for the purpose of preparing food for human consumption, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, and is fired exclusively on natural gas, and where the process VOC emissions are less than one pound per day.

10-2  
(cont.)

**CONCLUSION**

Albertsons appreciates your consideration of these comments and requests that the SCAQMD consider the burden on grocery stores, which provide essential products for the community. The ovens are exempt from permitting under SCAQMD Rule 219, but the requirement to keep production records for each oven, as required by the Rule 222 registrations, is overly burdensome and provides no benefit to air quality. We request amending Rules 219 and 222 to classify grocery stores as “eating establishments,” which are exempt from permitting and do not require recordkeeping.

Sincerely,

Sarah Kelsay  
Project Manager; Environmental, Risk and Compliance  
Albertsons Companies, Inc  
(551) 265-0998  
[Sarah.Kelsay@albertsons.com](mailto:Sarah.Kelsay@albertsons.com)

- cc: Yunie Osias, SCAQMD
- Mike Laybourn, SCAQMD
- Kalam Cheung, SCAQMD
- Jane Anderson, Albertsons
- Peter Moore, Yorke Engineering
- Judy Yorke, Yorke Engineering
- Joseph Steirer, Yorke Engineering
- Jameson Edwards, Yorke Engineering

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**Responses to Albertsons Companies Inc, Email Correspondence, submitted 1/18/23**

Response 10-1: As described in the comment letter, existing Rule 219 exempts permitting requirements for food ovens less than 2,000,000 Btu/hr that are fired on natural gas, and where VOC emissions are less than one pound per day. The exemption provided in Rule 219 for this equipment category is contingent upon meeting the registration requirements in Rule 222. In response to a U.S. EPA comment, PAR 219 removes instances where the exemption from permits is contingent on a Rule 222 filing. This revision is an administrative revision that relieves South Coast AQMD from submitting Rule 222 for SIP approval but does not change any existing requirements or procedures. Facilities subject to Rule 222 filing requirements remain subject to filing requirements under PAR 222.

Under South Coast AQMD permitting procedures, a person shall not operate or use any equipment that emits or controls air contaminants without receiving a permit to operate, unless the equipment or activity is exempt under Rule 219. As described in the staff report, Rule 219 includes provisions that require facilities to demonstrate eligibility for a Rule 219 exemption from being required to obtain permits. Similarly, facilities that submit a Rule 222 filing as an alternative to permits must demonstrate compliance with operating parameters included in the Rule 222 filing. These provisions are necessary to ensure that only eligible equipment or operations (i.e., those with low emissions) are exempted from obtaining a permit. Existing recordkeeping provisions in Rule 222 subparagraph (d)(1)(G) require facilities to maintain records sufficient to verify the description of the emission sources or equipment, data necessary to estimate output of emissions sources, and records used to demonstrate compliance with operating conditions. In the case for food ovens, records are required to verify that the process VOC emissions are below one pound per day. A food oven that has exceeded the one pound per day VOC emission limit is not eligible for the Rule 219 exemption or the Rule 222 filing program, and instead requires a permit to operate.

As mentioned in the comment letter, PAR 222 includes an update to streamline the recordkeeping requirements by allowing compliance with a daily emission limit for process VOC emissions for food ovens to be verified based on the calendar monthly emissions divided by 30. Additionally, the staff report clarifies that equipment with low process VOC emissions may choose to demonstrate compliance with the daily limit by calculating the maximum potential to emit assuming full operations, including 24 hours of operating hours and maximum loading/throughput. If the equipment's maximum potential to emit is below the daily limit, a daily

operation log is not required, but an annual record such as production and purchase record is needed to verify these parameters, and thus compliance. See Requirements [subdivision(d)] on page 3-4 of the staff report for a more detailed discussion.

Response 10-2: In addition to the responses discussed above, the 2022 AQMP calls for over 60% reduction in NO<sub>x</sub> emissions from stationary sources including food ovens. Both NO<sub>x</sub> and VOCs are the products of combustion from natural gas-fired food ovens, and food ovens that process foods containing yeast or other VOC-containing ingredients also emit VOC emissions from the baking or cooking process. Recordkeeping is required to demonstrate that the process VOC emissions are below the one pound per day threshold in Rule 219 and Rule 222, and thus exempt from permitting. Additionally, registering these food ovens would provide more accurate inventory and facilitate the rule development process. The existing provisions for eating establishments should not be extended to food ovens in grocery stores. Please also refer to response to comments 3-2 and 3-3.



**Comment Letter #11****Radtech, submitted 1/18/23**January 18<sup>th</sup>, 2023

Mr. Wayne Nastri  
 Executive Officer  
 South Coast Air Quality Management District  
 21865 Copley Drive  
 Diamond Bar, CA 91765

Re: Rule 219 -- Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear Mr. Nastri:

RadTech is a non-profit trade organization representing over 800 members in North America who are involved in the Ultraviolet/Electron Beam and Light Emitting Diode (UV/EB/LED) industry. We also have chapters in Europe and Asia. UV/EB/LED has been recognized by the District as an environmentally friendly technology because our materials are not formulated with Volatile Organic Compounds (VOCs) or toxic air contaminants. The district board has committed to policies that provide incentives for businesses who choose these processes. One such incentive is the removal of regulatory barriers to implementation by not requiring permits. Rule 219 is the rule that lays out the permit exemptions.

RadTech seeks amendments to Rule 219 because portions of the current rule treat all coating processes alike regardless of their environmental benefit. Companies are being required to pay \$7,000 in permit fees where all emissions were found to be ZERO by the District's own Engineering Division. The only reason these companies are being required a permit is because they added a UV material to their existing solvent borne coating. The district's current rule language tethers the zero emission process to the solvent process and considers the pollution prevention process a modification of a solvent system, thereby disregarding the environmental benefits of UV/EB/LED and imposing unnecessary financial burdens on businesses.

11-1

We have participated in various working group meetings and individual meeting with staff. We cannot support the rule in its current version because it does not remedy the concerns of our industry. Specifically, the following proposed language in Subparagraphs (d)(8)(H) and (d)(12)(L) is problematic:

11-2

*“There is no physical change to the configuration of the existing air pollution control equipment associated with the equipment or operation”*

The current proposal makes it so that any physical change constitutes a modification and therefore necessitates a permit with accompanying application fees. Engineering staff is of the opinion that adding metal ducts and changing air flow is a physical change. Air is sometimes introduced in order to cool UV lamps in order to prevent overheating and to ensure the substrate is not damaged. This does not cause any emissions increase and should not require a permit. We ask that the language be modified as follows:

11-2  
(cont.)

*“There is no physical change to the configuration of the existing air pollution control equipment associated with the equipment or operation, that would result in a net emissions increase”*

Additionally, we do not support the creation of additional recordkeeping under the current proposal. The current rule allows facilities to submit a verification form to report their emissions and no additional forms are needed so long as there are no changes. We urge the district to retain this provision rather than burden facilities with repeatedly reporting the same information. This exercise generates red tape but does nothing to reduce emissions.

11-3

We hope that the district recognizes that facilities that convert to UV/EB/LED are providing added emission reductions that are not called for in the district rules and they are preventing pollution of combustion contaminants as there is no need for add-on controls. These actions are consistent with the district’s clean air goals and should be encouraged. Putting regulatory burdens in the way of companies who invest in clean technologies such as UV/EB/LED undermines clean air goals.

We look forward to a productive rulemaking for both the district and our industry.

Sincerely,

Rita Loof

Director, Environmental Affairs

**Responses to Radtech, Email Correspondence, submitted 1/18/23**

- Response 11-1: Existing Rule 219 contains provisions to clarify when an exemption from a South Coast AQMD permit is appropriate; some based on product material, and some based on product usage. The information provided in the comment letter about permit fees is misleading as the referenced fees were specific to a high use, solvent-based operation that was adding a photoinitiator to a coating that would not comply with Rule 1136 – Wood Products Coatings. It is not appropriate to analyze the photoinitiator aspect of the coating operation as if it were separate from the solvent-based aspect. Additionally, in the specific example cited in the comment letter, the facility would not meet the existing Rule 219 low product usage provisions (i.e., one gallon per day or less or 22 gallons per calendar month or less). Finally, the claim that “The only reason these companies are being required a permit is because they added a UV material to their existing solvent borne coating” is inaccurate. Aside from the fact that there is only one identified example, the claim neglects the fact that the project also included the addition of a UV curing tunnel to the permanent total enclosure (PTE) that houses the coating lines. As such the equipment description on the existing permit no longer reflected the equipment at the facility. Significantly, *the proposed amendments would exempt the additions of both the photoinitiator and the UV curing tunnel from the need for a permit application provided low-VOC coatings were used and the UV lamps were cooled with air drawn from within the Permanent Total Enclosure (PTE) rather than introducing air from outside the PTE for this purpose.* Coating facilities utilizing PTEs as a control strategy are typically large sources of VOC emissions. Air flow and air velocities are the primary design criteria for PTEs to ensure that insufficient or excessive air flow does not result in fugitive VOC emissions from a permitted process contrary to South Coast AQMD rule requirements and permit conditions. This air flow is analyzed in an engineering evaluation by South Coast AQMD to follow EPA Method 204. Pursuant to EPA Method 204, “If the criteria are met and if all the exhaust gases from the enclosure are ducted to a control device, then the volatile organic compounds (VOC) capture efficiency (CE) is assumed to be 100 percent, and CE need not be measured. However, if part of the exhaust gas stream is not ducted to a control device, CE must be determined.” These steps must be included in an engineering evaluation if additional air is introduced into a PTE for cooling purposes of a UV/EB system within a PTE.
- Response 11-2: The exemption condition referenced in the comment letter [included in clauses (d)(8)(H)(iii) and (d)(12)(L)(iii)] are necessary to ensure that there is not an increase in emissions associated with changes to equipment or processes. Evaluation of any modifications to the air flow is necessary to

ensure continued control device performance when equipment or processes have high VOC emission sources or when non-compliant coatings are used, and add-on controls are necessary. Furthermore, this comment specifically uses the example of introducing additional air “in order to cool UV lamps in order to prevent overheating and to ensure the substrate is not damaged.” While it is true that this introduction of cooling air does not increase the amount of uncontrolled emissions generated by the coating or printing process, it does pose the very real possibility of adversely affecting the performance of the air pollution control system because (1) it may not be able to accommodate the additional air flow and (2) the resulting decrease in the exhaust stream’s VOC concentration may impact the efficiency of the control device and/or require the use of additional supplemental fuel.

Response 11-3: As described in the preliminary draft staff report, the one-time submittal option described in the comment to replace ongoing recordkeeping was specifically identified by U.S. EPA as an area of deficiency that may impact Rule 219 SIP approval. Adequate recordkeeping requirements are essential to ensure Rule 219 could be approved into the SIP. As described in the preliminary draft staff report, only one facility has submitted a low-VOC verification form since the provisions were added in 2017.

**Comment Letter #12**

**UV Specialties, LLC, submitted 1/18/23**



January 18, 2023

Mr. Wayne Nastri  
Executive Officer  
South Coast Air Quality Management District  
[Wnastri@aqmd.gov](mailto:Wnastri@aqmd.gov)

Re: Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II

Dear Mr. Nastri:

UV Specialties, LLC is involved in the manufacture and sale of UV curable coatings, with several clients in Southern California. We welcome the opportunity to comment on the proposed amendments to Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II. We very much appreciate the direction your board has given to staff to amend the rule in order to accommodate some of the latest innovations in our industry. While we appreciate staff’s efforts, the current proposal does not take into consideration issues encountered by companies like our clients. The current rule treats all coating processes alike regardless of their environmental benefit. UV/EB/LED processes are not formulated with Volatile Organic Compounds (VOCs) or toxics air contaminants. Conversion away from solvent processes benefits the District and your Board has provided incentives in the form of regulatory flexibility through permit exemptions in Rule 219.

According to staff, the current rule language requires a permit for UV/EB/LED operations that are part of operations that also have solvent systems. It is unfair to attribute the emissions of a solvent system to a UV/EB/LED process with zero or near zero emissions simply because they are located in the same facility. This approach discourages facilities who are exploring conversion to UV/EB/LED but are unable to convert the entire facility. Businesses who are willing to invest in clean technologies should be encouraged to do so and saddling them with added permit costs is counterproductive to the District’s mission.

The staff proposal to require permits whenever facilities change ducting in order to change air flow, is especially troublesome. We hope we can continue to work with staff to add language that would remedy the harm being done to businesses in the South Coast who are looking to partially convert to UV/EB/LED processes.

12-1

12-2

Sincerely,

Howard Ragin  
Partner, UV Specialties, LLC

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Itasca, IL 60143

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**Responses to UV Specialties, LLC, Email Correspondence, submitted 1/18/23**

Response 12-1: Please refer to response to comment 5-1.

Response 12-2: Please refer to response to comment 5-2.

**Comment Letter #13****Albertsons email, submitted 1/26/23**

**Subject:** Additional questions in regards to PAR 219 and PAR 222 - Albertson's Companies

Good Afternoon SCAQMD Staff,

After this most recent meeting with the Stationary Source Committee Board, we have some additional questions.

SCAQMD Rule 219 provides a permit exemption for small food ovens such as those in grocery stores. Although exempt from permitting, Rule 222 requires that small food ovens be registered with SCAQMD by filing a form and paying a fee. The registrations also require that grocery stores keep records of the food heated in each oven to demonstrate that volatile organic compound (VOC) emissions are less than one pound per day. We contacted SCAQMD staff to request rule revisions to ease the burden on grocery stores.

Rule 219 provides a blanket permit exemption for eating establishments. Since grocery stores prepare food for human consumption the SCAQMD could consider them eating establishments. We submitted a letter to District staff to request that they exempt grocery store food ovens the same as for eating establishments. As of today, we have not received a written response from SCAQMD.

|13-1

During the SCAQMD Stationary Source Committee meeting on January 20 Michael Krause stated that the staff is proposing rule revisions that may allow monthly recordkeeping. However, it is not clear what the recordkeeping requirements will look like. Mr. Krause resisted the proposal to treat grocery stores like eating establishments, but stated that some grocery stores may be classified as “eating establishments.”

1) Where is the definition of “eating establishment” as referenced in Rules 219 and 222?

|13-2

2) Would records be required for all take-out or food delivery establishments with ovens?

|13-3

3) Conversely, would grocery stores with eating areas then be “eating establishments”?

|13-4

4) Would records be required for all grocery stores, even small mom & pop stores, panaderias, etc.?

|13-5

5) What is the District proposing for recordkeeping for food ovens in grocery stores?

|13-6

6) What about stores with more than one oven? Would records be required for each oven?

|13-7

7) What is the air quality benefit of keeping records from food ovens with calculated VOC emissions below 1 lb./day?

|13-8

8) What will the District do with these records?

|13-9

9) What would an inspector do if they found a store does not these records? Would they issue a notice of violation and fines at \$10,000/day?

|13-10

And finally, what about the idea of keeping the requirement to register food ovens, but eliminate the recordkeeping burden? An inspector can always request information and determine VOC emissions on their own.

|13-11

Thank you,

**Sarah Kelsay**

**Environmental Project Manager**

**551-265-0998 Cell**

[Sarah.Kelsay@albertsons.com](mailto:Sarah.Kelsay@albertsons.com)



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**Responses to Albertsons Email Correspondence, submitted 1/25/23**

- Response 13-1: South Coast AQMD appreciates the involvement of Albertsons and their consultants in the PAR 219/222 development process and is grateful for information provided in the comment letters and on conference calls with South Coast AQMD staff. As mentioned, the existing Rule 219 food oven exemption provisions are for equipment with a rated maximum heat input capacity of 2,000,000 Btu/hour or less, fired exclusively on natural gas and the process VOC emissions are less than one pound per day. The one pound per day threshold is consistent with South Coast AQMD permitting procedures approved by U.S. EPA. For comments regarding recordkeeping provisions, please refer to response to comments 3-3 and 10-1.
- Response 13-2: Eating establishments are not defined in South Coast AQMD regulations but a statement has been added to the Draft Staff Report to clarify that for the purposes of Rule 219, eating establishments do not include facilities where food is prepared and packaged for subsequent sale, such as retail stores.
- Response 13-3: Food ovens used in eating establishments for the purpose of preparing food for human consumption is currently exempted from permits under existing Rule 219 [currently included in subparagraph (d)(9)(E) in PAR 219]. Under current Rule 219 practices, all sources must demonstrate an ability to qualify for a listed exemption from permits. Records to demonstrate that food ovens at a takeout and delivery establishment is used for the purpose of preparing food for human consumption would be required.
- Response 13-4: As described in the Stationary Source Committee meeting, equipment that only serves the eating area in a grocery store could be exempt under the provisions for eating establishments (PAR 219 (d)(9)(E)). Equipment that serves the retail part of the grocery store does not qualify for such exemption but may still be exempt from permitting under PAR 219 (d)(2)(C). Please also refer to response to comment 13-3.
- Response 13-5: All facilities, including small business, that are seeking to be exempt from permits under Rule 219 are required to demonstrate that the equipment or process meets the applicable thresholds. Facilities that own or operate emission sources or equipment subject to Rule 222 filing requirements are required to maintain records sufficient to verify the description of the emission sources or equipment and that they are in compliance with operating conditions. As described in the staff report, this may involve documentation that the worst case or highest emission potential for any equipment, processes, or operations is below the stated exemption

provision, parameter, requirement, or limitation. Please also refer to response to comment 10-1.

- Response 13-6: Please refer to response to comment 3-3 for a discussion on the PAR 222 provisions to address grocery store stakeholder comments on recordkeeping.
- Response 13-7: Rule 222 filings are by emission source or equipment (not by facility). As such, the daily limit of 1 lb. per day for food ovens is applicable for each piece of equipment. Verifications/records that are based on emissions from all food ovens at a facility are considered acceptable as long as the facility-wide emissions from this source category is below the daily limit for each piece of equipment.
- Response 13-8: Under South Coast AQMD permitting procedures, a person shall not operate or use any equipment that emits or controls air contaminant without receiving a permit to operate, unless the equipment or activity is exempt under Rule 219. As described in the staff report, Rule 219 includes provisions that require facilities to demonstrate eligibility for a Rule 219 exemption from being required to obtain permits. Similarly, facilities that submit a Rule 222 filing as an alternative to permits must demonstrate compliance with operating parameters included in the Rule 222 filing. These provisions are necessary to ensure that only eligible equipment or operations (i.e., those with low emissions) are exempted from obtaining a permit. Please also refer to response to comment 10-2.
- Response 13-9: Rule 219 and Rule 222 do not require the submittal of a demonstration that equipment is exempted from permits under 219 or that equipment is meeting operating conditions listed in a Rule 222 filing. Instead, this information must be made available to South Coast AQMD compliance staff as part of compliance inspections. These provisions apply to all applicable sources.
- Response 13-10: During a compliance inspection, an inspector may take various enforcement actions, including issuing a Notice to Comply or a Notice of Violation, if a facility is found to be in violation of any South Coast AQMD rules or regulations. If a Notice of Violation is issued, civil penalties are assessed on a case-by-case basis in accordance with Health and Safety Code Section 42402, *et seq.*
- Response 13-11: PAR 222 does not change filing requirements for facilities operating food ovens but an exemption provision [subparagraph (d)(9)(O)] has been added to PAR 219 to clarify that food ovens that do not emit process VOC emissions are exempt from the requirement to obtain a permit. Food ovens

exempt from permitting under PAR 219 (d)(9)(O) would not be required to submit registration under PAR 222. Please refer to response to comments 3-3, 10-1 and 13-6 for a description of clarifications to recordkeeping provisions for operators of food ovens.