



70 ppb Ozone Standard Implementation Evaluation  
(70 ppb O<sub>3</sub> Evaluation):  
RACT SIP Analysis;  
Federal Negative Declarations; and  
Emission Statement Certification

October 28, 2019

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# Table of Contents

<i>Abbreviations and Acronyms</i> .....	<i>ii</i>
<b>Executive Summary</b> .....	<b>1</b>
<b>CHAPTER 1 - Introduction and Background</b> .....	<b>3</b>
<b>INTRODUCTION</b> .....	<b>5</b>
<i>Purpose</i> .....	<i>5</i>
<b>BACKGROUND</b> .....	<b>5</b>
<i>Regulatory History</i> .....	<i>5</i>
<i>Federal Legal Requirements</i> .....	<i>5</i>
<i>Pollutant Description and Health Effects</i> .....	<i>5</i>
<i>Setting</i> .....	<i>6</i>
<b>CHAPTER 2 – RACT SIP Evaluation</b> .....	<b>7</b>
<i>Process</i> .....	<i>9</i>
<i>CTG Sources</i> .....	<i>9</i>
<i>Major Non-CTG Sources</i> .....	<i>9</i>
<b>CHAPTER 3 – MDAQMD RACT Analysis</b> .....	<b>17</b>
<i>2019 RACT Rule Analysis</i> .....	<i>19</i>
<i>Federal Negative Declarations</i> .....	<i>21</i>
<b>CHAPTER 4 – Certification</b> .....	<b>27</b>
<i>Emission Statement Certification</i> .....	<i>27</i>
<b>Appendices</b> .....	<b>A-1</b>
<i>Appendix A – RACT Evaluations</i> .....	<i>A-1</i>

## Abbreviations and Acronyms

ACT.....	Alternative Control Technology
AQMA .....	Air Quality Management Area
BACT .....	Best Available Control Technology
CARB.....	California Air Resources Board
CTG.....	Control Techniques Guideline
CFR.....	Code of Federal Regulations
FCAA.....	Federal Clean Air Act
FND.....	Federal Negative Declaration
FONA.....	Federal Ozone Nonattainment Area
MDAQMD .....	Mojave Desert Air Quality Management District
NAAQS.....	National Ambient Air Quality Standard
NO <sub>x</sub> .....	Oxides of Nitrogen
O <sub>3</sub> .....	Ozone
POTW .....	Publicly Owned Treatment Works
RACT .....	Reasonably Available Control Technology
SBCAPCD .....	San Bernardino County Air Pollution Control District
SCAQMD .....	South Coast Air Quality Management District
SIP.....	State Implementation Plan
USEPA.....	United States Environmental Protection Agency
VOC .....	Volatile Organic Compounds

## Executive Summary

Effective October 26, 2015 (80 FR 65292), the United States Environmental Protection Agency (USEPA) lowered the primary ozone National Ambient Air Quality Standard (NAAQS) from 0.075 parts per million (ppm) to 0.070 ppm (or, 70 parts per billion (ppb) for ease of reference). The Federal Clean Air Act (FCAA) requires newly designated ozone non-attainment areas to implement Reasonably Available Control Technology (RACT) on certain sources, including all major sources of ozone precursors. For the purposes of the FCAA, portions of the District have been designated non-attainment for ozone and classified as Severe-15 for the 1997, 2008, and 2015 ozone standard (May 8, 2012, 77 FR 26950, June 6, 2013, 78 FR 34178, and October 26, 2015 80 FR 65292). The Mojave Desert Air Quality Management District (MDAQMD) has evaluated its adopted rules and all of its major sources of ozone precursors to ensure that current rules satisfy RACT.

The FCAA also requires areas designated non-attainment and classified moderate and above to implement RACT for sources subject to Control Techniques Guidelines (CTG) documents issued by the United States Environmental Protection Agency (USEPA) for “major sources” of volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>) which are ozone precursors. For those CTG source categories not represented within the area designated non-attainment for ozone, USEPA requires the submission of a Federal Negative Declaration certifying that those sources are not present. The MDAQMD has examined the list of CTGs to determine which do not have corresponding sources within the jurisdiction of the District (major or minor) that meet the CTG applicability threshold, and is updating existing Federal Negative Declarations (FND) and adopting one new FND accordingly.

Additionally, the District must provide certification of their emission reporting program for VOC and NO<sub>x</sub> sources. The District has evaluated and is certifying existing State Implementation Plan (SIP)-approved Rule 107 – *Certification and Emission Statements* as meeting this requirement.

This document represents a current and complete 70 ppb Ozone Standard Implementation Evaluation (70 ppb O<sub>3</sub> Evaluation): RACT SIP Analysis; FNDs; and, Emission Statement Certification to satisfy the District’s obligation for the 2015 ozone standard.

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# **CHAPTER 1 - Introduction and Background**

Purpose

Regulatory History

Federal Legal Requirements

Pollutant Descriptions

Setting

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## **INTRODUCTION**

### **Purpose**

The FCAA requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors. This document: (1) reviews all available instances of RACT for applicability to the MDAQMD; (2) reviews all MDAQMD major sources for RACT applicability; and (3) identifies any actions the MDAQMD must take to address applicable RACT requirements. This document satisfies 42 U.S.C. §§7511a (FCAA §182) regarding RACT requirements for the 2015 ozone NAAQS.

## **BACKGROUND**

### **Regulatory History**

The USEPA designated a portion of the southwestern desert part of San Bernardino County as non-attainment of the 2015 ozone NAAQS as part of the Southeast Desert Modified Air Quality Management Area (AQMA) on April 15, 2004 (40 CFR 81). This large “maintenance area” was classified moderate based on a 128 ppb ozone design value calculated from 2000 through 2002 eight-hour ozone values within the San Bernardino County portion of the area.

The MDAQMD was established on July 1, 1993, pursuant to H&SC §41200 et seq. (Statutes 1992 ch. 642). The MDAQMD was a successor agency to the San Bernardino County Air Pollution Control District (SBCAPCD), which had jurisdiction over the desert portions of San Bernardino County commencing in February 1977 through the formation of the MDAQMD. The Palo Verde Valley portion of eastern Riverside County was annexed by the MDAQMD from the South Coast Air Quality Management District (SCAQMD) effective July 1, 1994, pursuant to provisions of H&SC 41210(c) and MDAQMD Resolution 94-03.

Ozone plans have been adopted by the MDAQMD to address federal ozone planning requirements, including RACT applicability. This document updates the Federal RACT portion of all previously submitted plans.

### **Federal Legal Requirements**

Sections 182(b)(2) and 182(f) of the FCAA require that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors (42 U.S.C. §7511a). Ozone non-attainment areas classified moderate and higher for the 2015 ozone NAAQS must submit a RACT SIP analysis by August 3, 2020 (40 CFR 51.1312).

### **Pollutant Description and Health Effects**

Ozone (O<sub>3</sub>) - A colorless gas that is a highly reactive form of oxygen. It has a strong odor when highly concentrated. Ozone can occur naturally but can also be formed from other compounds through photochemistry, a complex system of reactions with hydrocarbons and oxides of nitrogen in the presence of sunlight (ultraviolet). The Mojave Desert Air Basin experiences ozone concentrations in excess of the State and Federal Ambient Air Quality Standards.

Ozone can cause respiratory irritation and discomfort, making breathing more difficult during exercise. Ozone can reduce the respiratory system’s ability to remove inhaled particles, increase

pulse rate, decrease blood pressure and reduce the body's ability to fight infection. After six hours of exposure a healthy person can have significant reduction of lung function. It is an irritant of the skin, eyes, upper respiratory system, and mucous membranes, although symptoms disappear after exposure. It may also be a carcinogen.

## **Setting**

The MDAQMD includes the desert portion of San Bernardino County and a portion of eastern Riverside County commonly known as the Palo Verde Valley. A portion of the MDAQMD has been designated non-attainment for the eight-hour ozone NAAQS by USEPA as a portion of the Southeast Desert Modified AQMA (herein referred to as the Federal Ozone Nonattainment Area (FONA)). The Southeast Desert Modified AQMA was defined using the Los Angeles-Anaheim-Riverside Consolidated Metropolitan Statistical Area, and includes a portion of the counties of Los Angeles, Riverside and San Bernardino (40 CFR 81.167). The FONA includes the communities of Phelan, Hesperia, Adelanto, Victorville, Apple Valley, Barstow, Joshua Tree, Yucca Valley and Twentynine Palms (the southwestern portion of the MDAQMD).

The MDAQMD covers more than 20,000 square miles and included 359,551 persons as of the 1990 census (approximately 445,000 in 2002). The region is characterized by hot, dry summers and cool winters, with little precipitation. The MDAQMD is a growing bedroom community, but does have significant mining and military activity. The National Training Center at Fort Irwin, the Marine Corps Air Ground Combat Center, and portions of Edwards Air Force Base and the China Lake Naval Air Weapons Station are in the MDAQMD. The MDAQMD also includes the Mojave National Preserve, portions of Death Valley National Park and Joshua Tree National Park

The primary roadways in the MDAQMD are Interstate 15, Interstate 40 and Interstate 395. All of these highways carry a significant amount of transiting heavy-duty truck traffic, and Interstate 15 carries a substantial amount of commuter traffic into the greater Los Angeles Basin.

## **CHAPTER 2 – RACT SIP Evaluation**

Process

CTG Sources

Major Non-CTG Sources

Major Source Table

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## **Process**

The MDAQMD reviewed a USEPA-provided list of source categories and applicable CTGs that collectively define RACT. The MDAQMD reviewed this list for local applicability, and the results are presented in Appendix “A.”

## **CTG Sources**

Those categories of sources covered by a published CTG are referred to as CTG sources. For each CTG source category, the MDAQMD has identified whether or not a current source is sited within its jurisdiction, or whether it is likely a source may be sited within its jurisdiction. In most cases, where the MDAQMD has no source that meets the category, the MDAQMD will file a FND for that category. For some categories the MDAQMD has an adopted rule that applies to the category that has been deemed to meet the applicable RACT for that category. In a few cases, the MDAQMD has a rule which has been evaluated and needs to be updated for RACT, and the MDAQMD is accordingly committing to amending the rule to current RACT for those source categories. Chapter 3 details MDAQMD actions identified by this evaluation process.

## **Major Non-CTG Sources**

RACT is also required for all major sources of ozone precursors within the FONA. For severe non-attainment areas a major source is defined as any stationary source or group of sources that emits, or has the potential to emit, at least 25 tons per year of VOCs or NO<sub>x</sub> (FCAA 182(d) and (f)). Table 1 below presents a list of all facilities with Title V Federal Operating Permits within the MDAQMD (with the sources in the FONA identified), whether the facility is a major source of ozone precursors, and the current RACT applicable to those sources. In a few cases the MDAQMD has a rule which has been evaluated and needs to be updated for RACT, and the MDAQMD is accordingly committing to amend the rule to current RACT for those source categories. Chapter 3 details MDAQMD actions identified by this evaluation process.

**Table 1 - Major Source Table**

<b>Source/ Federal Operating Permit</b>	<b>Major Source: NO<sub>x</sub>/VOC</b>	<b>Description</b>	<b>Applicable CTG/RACT</b>	<b>Applicable District Rule(s)</b>
<b>FONA</b>				
CalNev Pipeline Barstow 200353	VOC	Refined petroleum product storage and bulk dispensing	1. Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA- 450/2-77-026, 12/77, NTIS PB- 275-060), CTG. 2. Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035, 12/77, NTIS PB-276-722), CTG.	463
CalPortland Company 223900003	NO <sub>x</sub> VOC	Portland cement manufacturing	No applicable CTG.  ACT Document-NOx Emissions from Cement Manufacturing (EPA-453/R- 94-004, 3/94).	1161
Cemex Construction Materials Pacific, River Plant and Mountain Quarry Plant 100005 & 100006	NO <sub>x</sub> VOC	Portland cement manufacturing	No applicable CTG.  ACT Document-NOx Emissions from Cement Manufacturing (EPA-453/R- 94-004, 3/94).	1161
County of San Bernardino Solid Waste Management Division (Barstow Sanitary Landfill) 102103122	N/A	Municipal landfill with landfill gas control system	No applicable CTG.  <b>40 CFR 64 Subpart WWW requires Title V Permit, not a major source.</b>	1126
County of San Bernardino Solid Waste Management Division (Victorville Sanitary Landfill) 102102443	N/A	Municipal landfill with landfill gas control system	No applicable CTG.  <b>40 CFR 64 Subpart WWW requires Title V Permit, not a major source.</b>	1126

Source/ Federal Operating Permit	Major Source: NO <sub>x</sub> /VOC	Description	Applicable CTG/RACT	Applicable District Rule(s)
Daniel Company (Pending) 26671576	N/A	Composite fiberglass manufacturing of air pollution control systems.	No applicable CTG.  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	1162
Ducommun Aero Structures 5400246	N/A	Aerospace manufacturing (chemical milling and related coating)	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations CTG & MACT (See 59 FR 29216, 6/6/1994); CTG (Final), (EPA-453/R-97-004, 12/97).	1118 1157
Duffy Electric Boat Company 121502114	N/A	Pleasure Craft Manufacturing	1. Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials (EPA-453/R-08-004, September 2008).  2. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, Table 5 (EPA-453/R-08-003, September 2008).  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	1106 1162
Fiber-Care Baths 88201634	N/A (SM-80 VOC)	Composite fiberglass manufacturing	No applicable CTG.  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	1162
High Desert Power Project 104701849	NO <sub>x</sub> VOC	Two on one combined cycle gas turbine power trains	No applicable CTG.  1. ACT Document-NO <sub>x</sub> Emissions from Stationary Gas Turbines (EPA-453/R-93-007, 1/93). 2. ACT Document - Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258).	1158

Source/ Federal Operating Permit	Major Source: NO <sub>x</sub> /VOC	Description	Applicable CTG/RACT	Applicable District Rule(s)
Luz Solar Partners (Harper Lake) SEGS VIII & IX 60300975	NO <sub>x</sub> VOC	Solar thermal electricity generating facility with gas-fired boiler	No applicable CTG.  1. ACT Document-NO <sub>x</sub> Emissions from Utility Boilers (EPA-453/R-94-023, 3/94). 2. Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258).	1157
Luz Solar Partners (KJC) Segs III-VII 27700941	NO <sub>x</sub>	Solar thermal electricity generating facility with gas-fired boiler	No applicable CTG.  1. ACT Document-NO <sub>x</sub> Emissions from Utility Boilers (EPA-453/R-94-023, 3/94). 2. Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258).	1157
Mitsubishi Cement 11800001	NO <sub>x</sub> VOC	Portland cement manufacturing	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Cement Manufacturing (EPA-453/R- 94-004, 3/94).	1161
Mobile Pipe Lining and Coating 39701067	VOC	Construction pipe coating	1. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, Table 2 (EPA-453/R- 08-003, September 2008).	1115
Molded FiberGlass (MFG) West 42701095	N/A	Composite fiberglass construction and coating	No applicable CTG.  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	1162
Northwest Pipe Company 44501112	VOC	Construction pipe coating	1. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, Table 2 (EPA-453/R- 08-003, September 2008).	461 1115

Source/ Federal Operating Permit	Major Source: NO <sub>x</sub> /VOC	Description	Applicable CTG/RACT	Applicable District Rule(s)
Pacific Gas & Electric Company (Hinkley Compressor Station) 1500535	NO <sub>x</sub> VOC	Gaseous-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	1160
Southern California Gas (Adelanto Turbine/Compressor Station) 3100066	NO <sub>x</sub>	Gas turbine compressing natural gas transmission pipeline	No applicable CTG.  1. ACT Document-NO <sub>x</sub> Emissions from Stationary Gas Turbines (EPA-453/R-93-007, 1/93). 2. Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258).	1159 1160
Southern California Gas Company (Newberry Springs Compressor Station) 3100065	NO <sub>x</sub> VOC	Gaseous-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	1160
Specialty Minerals 62900262	N/A	Limestone quarrying, crushing and screening	No applicable CTG.  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	463
Unlimited Performance Products 121902118	N/A (SM-80 VOC)	Composite fiberglass construction and coating	No applicable CTG.  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	1115 1116 1162
US Air Force Edwards AFB (Air Force Research Laboratory) 8300565	N/A	Solid and liquid fueled rocket test stands	No applicable CTG  <b>Not a major source of ozone precursors, but still subject to Title V.</b>	1160

Source/ Federal Operating Permit	Major Source: NO <sub>x</sub> /VOC	Description	Applicable CTG/RACT	Applicable District Rule(s)
U.S. Marine Corps Logistics Base, Barstow-Yermo Annex 8700587	NO <sub>x</sub> VOC	Military coating (all coating types)	1. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume I: Control Methods For Surface Coating Operations (EPA- 450/2-76-028, 11/76, NTIS PB- 260-386). 2. Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations CTG & MACT (See 59 FR 29216, 6/6/1994); CTG (Final), (EPA- 453/R-97-004, 12/97). 3. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, Table 2, 5 (EPA- 453/R-08-003, September 2008).	461 1106 1115 1116 1118 1157
<b>OUTSIDE FONA</b>				
Blythe Energy Project 130202262	NO <sub>x</sub>	Two on one combined cycle gas turbine power trains	No applicable CTG. 1. ACT Document-NO <sub>x</sub> Emissions from Stationary Gas Turbines (EPA-453/R-93-007, 1/93). 2. Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258).	N/A
Ivanpah 1,2, and 3 176903007 177003008 177103009	N/A	Solar thermal electrical generation	No applicable CTG. 1. ACT Document-NO <sub>x</sub> Emissions from Utility Boilers (EPA-453/R-94-023, 3/94). 2. Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258).	N/A

<b>Source/ Federal Operating Permit</b>	<b>Major Source: NO<sub>x</sub>/VOC</b>	<b>Description</b>	<b>Applicable CTG/RACT</b>	<b>Applicable District Rule(s)</b>
NAWS China Lake (North and South Range) 8800567	NO <sub>x</sub> VOC	Aerospace research and development, aerospace test stands	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations CTG & MACT (See 59 FR 29216, 6/6/1994); CTG (Final), (EPA- 453/R-97-004, 12/97).	N/A
Pacific Gas & Electric Company (Topock Compressor Station) 1500039	NO <sub>x</sub>	Gaseous-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	N/A
Searles Valley Minerals (Trona, Argus and Westend Facilities) 900002	NO <sub>x</sub> VOC	Soluble mineral extraction and refining	No applicable CTG	N/A
Southern California Gas (Blythe Compressor Station) 3101437	NO <sub>x</sub> VOC	Gaseous-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	N/A
Southern California Gas (Kelso Compressor Station) 3100067	NO <sub>x</sub>	Gas turbine and gas-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  1. ACT Document-NO <sub>x</sub> Emissions from Stationary Gas Turbines (EPA-453/R-93-007, 1/93). 2. Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 12/92, NTIS PB-93-150-258). 3. ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	N/A

<b>Source/ Federal Operating Permit</b>	<b>Major Source: NO<sub>x</sub>/VOC</b>	<b>Description</b>	<b>Applicable CTG/RACT</b>	<b>Applicable District Rule(s)</b>
Southern California Gas (North Needles Compressor Station) <i>3100069</i>	NO <sub>x</sub> VOC	Gaseous-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	N/A
Southern California Gas (South Needles Compressor Station) <i>3100068</i>	NO <sub>x</sub> VOC	Gaseous-fired internal combustion engines compressing natural gas transmission pipeline	No applicable CTG.  ACT Document-NO <sub>x</sub> Emissions from Stationary IC Engines (EPA-453/R-93-032, 7/93, Updated 9/2000).	N/A
*Rules 442, 1104, 1113, 1114, 1115, 1116 are not equipment specific and are applicable to all Title V Facilities.				

## **CHAPTER 3 – MDAQMD RACT Analysis**

2019 RACT Rule Analysis  
Federal Negative Declarations

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## **2019 RACT Rule Analysis**

The MDAQMD identified certain rules for RACT analysis. A complete list is contained in Appendix A. The following rules have been identified as requiring additional analysis:

### Rule 1114 – Wood Products Coating Operations

Rule 1114 – Wood Products Coating Operations was most recently amended January 22, 2018. This rule was approved in to the SIP (84 FR 31682, July 2, 2019) and determined to fulfill RACT for the 1997 and 2008 ozone NAAQS. The District has examined wood products coating rules for Districts with similar or more severe attainment status and has identified no rules which have been amended subsequent to the most recent MDAQMD amendment. The TSD issued for Rule 1114 on November 1, 2018 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items were recommended for consideration for the next rule revision. Rule 1114 may be amended to incorporate these recommendations.

### Rule 1115 – Metal Parts and Products Coating Operations

Rule 1115 – Metal Parts and Products Coating Operations was most recently amended January 22, 2018, and this amendment has not been approved into the SIP for the 2008 ozone standard. This rule was most recently approved in to the SIP (62 FR 67002, December 23, 1997) and determined to fulfill RACT for the 1990 amendment of the Clean Air Act. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the most recent amendment of MDAQMD Rule 1115. The TSD issued for Rule 1115 in December 1997 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items were recommended for consideration for the next rule revision. The District incorporated the 1997 TSD recommendations in the January 22, 2018 amendment. The District has received a verbal comment from EPA that the January 22, 2018 amendment of the rule needs to have a 10 tpy exemption removed to conform with 2.7 tpy CTG limit. Rule 1115 will be amended to incorporate this provision.

### Rule 1117 – Graphic Arts and Paper, Film, Foil and Fabric Coatings

Rule 1117 – Graphic Art and Paper, Film, Foil, and Fabric Coatings was most recently amended September 28, 2009. This rule was approved in to the SIP (77 FR 12495, March 1, 2012). The 2009 rule amendment was made in response to the Districts RACT SIP commitment in 2006 for the 1997 ozone standard. Subsequently in the *8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis* (February 2015) the District determined this amendment continued to fulfill RACT requirements for the 2008 ozone standard. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that some have been amended subsequent to the most recent amendment of MDAQMD Rule 1117, and SCAQMD Rule 1130 was included in the SIP after the SIP approval of MDAQMD Rule 1117 and therefore may require further analysis. The TSD issued for Rule 1117 in October 2011 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items was recommended for consideration for the next rule revision. The District will evaluate these recommendations, and review SCAQMD and YSAQMD rule limits, specifically for fountain solution, to determine if they affect current RACT. Rule 1117 may be amended to incorporate those provisions.

Rule 1118 – Aerospace Assembly, Rework and Component Manufacturing Operations

Rule 1118 – Aerospace Assembly Rework and Component Manufacturing Operations was most recently amended October 26, 2015. This rule was approved in to the SIP (82 FR 28240, June 21, 2017) and determined to fulfill RACT for the 2008 ozone standard. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the most recent amendment of MDAQMD Rule 1118, and therefore do not require further analysis. The TSD issued for Rule 1118 in November 2016 identified no deficiencies sufficient for EPA to proposed less than full approval at that time, but four items were recommended for consideration for the next rule revision. Rule 1118 may be amended to incorporate those provisions.

New Rule – Adhesive Applications

The MDAQMD has several rules which address adhesive application, but not all categories in the CTG are addressed by District rule. Therefore, the District commits to evaluating these CTG categories further, and if necessary, will adopt a new adhesives application rule.

**Proposed Rule Adoption Schedule**

The MDAQMD will adopt or amend any necessary rules by August 3, 2020.

## Federal Negative Declarations

Current MDAQMD review has identified many source categories that do not have corresponding sources (major or minor) within the jurisdiction of the MDAQMD. The District reviewed its permit files and the emission inventory for its Federal Clean Air Plan, and conducted SIC Code searches, the internet, yellow pages, and District inspectors and engineers knowledge, and has determined that there are no stationary sources or emitting facilities for the following CTG categories. The District also does not anticipate these sources in the future. For these source categories the MDAQMD is filing FNDs. In some cases, the FND is an update of an earlier FND. In every case, the District has reviewed CTG source categories for applicability within the entire nonattainment area under the jurisdiction of the MDAQMD. FND actions are summarized in Table 2 below.

**Table 2 - Federal Negative Declarations**

CTG	Source Category	Previously Adopted FNDs: 8-Hour Ozone Standard (84 ppb); 8-Hour Ozone Standard (75 ppb)	Current 2015 Ozone Standard (70 ppb)
Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks <b>EPA-450/2-77-008, 1977/05</b>	Cans	1/22/2007; 2/23/2015	Readopt
	Coils	1/22/2007; 2/23/2015	Readopt
	Automobiles and Light-Duty Trucks	1/22/2007; 2/23/2015	Readopt
Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds <b>EPA-450/2-77-025, 1977/10</b>	Leaks from Petroleum Refinery Equipment:	1/22/2007; 2/23/2015	Readopt
	1. Vacuum Producing Devices or Systems	1/22/2007; 2/23/2015	Readopt
	2. Process Unit Turnarounds	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Emissions from Existing Stationary Sources - Volume III: Surface Coating of Metal Furniture <b>EPA-450/2-77-032, 1977/12</b>	Coating of Metal Furniture	N/A; 2/23/2015	Readopt

CTG	Source Category	Previously Adopted FNDs: 8-Hour Ozone Standard (84 ppb); 8-Hour Ozone Standard (75 ppb)	Current 2015 Ozone Standard (70 ppb)
Control of Volatile Organic Emissions from Existing Stationary Sources - Volume IV: Surface Coating of Insulation of Magnet Wire <b>EPA-450/2-77-033 1977/12</b>	Insulation of magnet wire from wire coating ovens.	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Emissions from Existing Stationary Sources - Volume V: Surface Coating of Large Appliances <b>EPA-450/2-77-034 1977/12</b>	Surface coating of large appliances	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Emissions from Existing Stationary Sources - Volume VII: Factory Surface Coating of Flat Wood Paneling <b>EPA-450/2-78-032 1978/06</b>	Factory finished paneling (Flat wood Industry)	N/A; 2/23/2015	Readopt
Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment <b>EPA-450/2-78-036 1978/06</b>	Equipment leaks in petroleum refineries	8/23/2010; 2/23/2015	Readopt
Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products <b>EPA-450/2-78-029 1978/12</b>	Chemical synthesis; Fermentation; Extraction; Formulation and Packaging.	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires <b>EPA-450/2-78-030 1978/12</b>	Tire Manufacturing for passenger, light- and medium-duty trucks	1/22/2007; 2/23/2015	Readopt

CTG	Source Category	Previously Adopted FNDs: 8-Hour Ozone Standard (84 ppb); 8-Hour Ozone Standard (75 ppb)	Current 2015 Ozone Standard (70 ppb)
Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners <b>EPA-450/3-82-009 1982/09</b>	Large petroleum dry cleaners	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins <b>EPA-450/3-83-008 1983/11</b>	Manufacture of high-density polyethylene, polypropylene and polystyrene resins.	1/22/07, 08/23/10; 2/23/2015	Readopt
Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants <b>EPA-450/3-83-007 1983/12</b>	Natural gas/gasoline processing plants	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment <b>EPA-450/3-83-006 1984/03</b>	Synthetic organic chemical polymer and resin manufacturing equipment.	1/22/07, 8/23/10; 2/23/2015	Readopt
Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry <b>EPA-450/3-84-015 1984/12</b>	Subset of oxidation industry in which air, or air enriched with oxygen, is the oxidizing agent.	1/22/2007; 2/23/2015	Readopt
Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry <b>EPA-450/4-91-031 1993/08</b>	Reactors (other than those involving air oxidation processes) and distillation columns.	1/22/2007; 2/23/2015	Readopt

CTG	Source Category	Previously Adopted FNDs: 8-Hour Ozone Standard (84 ppb); 8-Hour Ozone Standard (75 ppb)	Current 2015 Ozone Standard (70 ppb)
Control Techniques Guidelines for Flat Wood Paneling Coatings <b>EPA-453/R-06-004 2006/09</b>	Flat Wood Paneling	N/A; 2/23/2015	Readopt
Control Techniques Guidelines for Large Appliance Coatings <b>EPA 453/R-07-004 2007/09</b>	Large appliance coatings.	1/22/2007; 2/23/2015	Readopt
Control Techniques Guidelines for Metal Furniture Coatings <b>EPA 453/R-07-005 2007/09</b>	Metal furniture coatings.	N/A; 2/23/2015	Readopt
Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings <b>EPA 453/R-08-003 2008/09</b>	Table 3 - Plastic Parts and Products	N/A; 4/23/2018	Readopt
	Table 4 - Automotive/Transportation and Business Machine Plastic Parts	N/A; 4/23/2018	Readopt
	Table 6 - Motor Vehicle Materials	N/A; 4/23/2018	Readopt
Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings <b>EPA 453/R-08-006 2008/08</b>	Automobile and Light-duty truck assembly facilities, including heavier vehicles such as busses, trash trucks as defined at 40 CFR 63.3176.	N/A; 2/23/2015	Readopt
Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations <b>EPA 453/R-08-002 2008/09</b>	Light-Duty Truck Primer-Surfacer and Topcoat Operations	N/A; 2/23/2015 (Not recognized by EPA)	Readopt

CTG	Source Category	Previously Adopted FNDs: 8-Hour Ozone Standard (84 ppb); 8-Hour Ozone Standard (75 ppb)	Current 2015 Ozone Standard (70 ppb)
Control Techniques Guidelines for the Oil and Natural Gas Industry <b>EPA-453/B-16-001 2016/10</b>	Emission sources in the oil and natural gas industry in the onshore production and processing segments of the oil and natural gas industry (i.e., pneumatic controllers, pneumatic pumps, compressors, equipment leaks, fugitive emissions) and storage vessel VOC emissions in all segments (except distribution) of the oil and natural gas industry.	N/A; New FND for the 2008 8-hr ozone standard <sup>1</sup>	New FND for the 2015 ozone standard <sup>2</sup>

<sup>1</sup> A SIP rule or FND was required to be submitted no later than 10/27/2018 in response to the CTG for the Oil and Natural Gas Industry (EPA-453/B-16-001, October 2016) for the 2008-8 hour ozone standard ([81 FR 74798](#), October 27, 2016). The FND was not filed due to a possibility of the CTG being withdrawn ([83 FR 10478](#), March 9, 2018). To date, the Oil and Natural Gas CTG has not been withdrawn and the required FND is now being adopted and submitted concurrently with this action.

<sup>2</sup> A FND is required to be submitted for the 2015 ozone standard.

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## **CHAPTER 4 – Certification**

### **Emission Statement Certification**

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## Emission Statement Certification

Federal Clean Air Act (FCAA) §182(a)(3)(B) requires ozone nonattainment areas to mandate submittal of emission statement data from certain sources of VOC and NO<sub>x</sub>.

The MDAQMD is certifying that the submitted Emission Statement Certification, covering the West Mojave Desert 8-Hour nonattainment areas for the 2015 ozone NAAQS, is at least as stringent as the requirements of FCAA §182(a)(3)(B) as specified in the final rule titled *Implementation of the 2015 National Ambient Air Quality Standard for Ozone: State Implementation Plan Requirements* (83 FR 62998, December 6, 2018).

The FCAA stipulates the following emission statement requirement be met:

FCAA Requirement	District Certification
Within 2 years after November 15, 1990, the State shall submit a revision to the State implementation plan to require that the owner or operator of each stationary source of oxides of nitrogen or volatile organic compounds provide the State with a statement, in such form as the Administrator may prescribe (or accept an equivalent alternative developed by the State), for classes or categories of sources, showing the actual emissions of oxides of nitrogen and volatile organic compounds from that source. (FCAA §182(a)(3)(B)(i))	Rule 107 – <i>Certification and Emission Statements</i> was adopted 09/14/1992, and SIP approved 5/26/04, 69 FR 29880
The first such statement shall be submitted within 3 years after November 15, 1990. Subsequent statements shall be submitted at least every year thereafter. (FCAA §182(a)(3)(B)(i))	The District reports emission data electronically to USEPA through CARB on an annual basis. Data has been transmitted annually since 1993.
The statement shall contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. (FCAA §182(a)(3)(B)(i))	Each statement contains a certification that the information contained in the statement is accurate to the best knowledge of the completer.
The State may waive the application of clause (i) to any class or category of stationary sources which emit less than 25 tons per year of volatile organic compounds or oxides of nitrogen if the State, in its submissions under subparagraphs (1) or (3)(A), provides an inventory of emissions from such class or category of sources, based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator. (FCAA §182(a)(3)(B)(ii))	Rule 107 – <i>Certification of Emissions Statements</i> §(c) allows a waiver provision contingent on reporting emissions to the state between 10-25 tons per year of VOC and NO <sub>x</sub> .

The 2015 eight-hour ozone standard implementation rule acknowledges that if an area has a previously approved emission statement rule in force for the former 2008 eight-hour, 1997 eight-hour, or 1979 one-hour ozone NAAQS, the existing rule is likely sufficient for meeting the emission statement requirement for the 2015 eight-hour ozone NAAQS. The District adopted

Rule 107 – *Certification and Emission Statements* on September 14, 1992 to cover the entire MDAQMD. The federal ozone nonattainment area within the MDAQMD has not changed since 1992. Additionally, the implementation rule recommends that air districts review the existing rule to ensure adequacy in the form of a written statement to the USEPA.

Based on its review of the various requirements of FCAA §182(a)(3)(B) compared to Rule 107 – *Certifications and Emission Statements* (pursuant to the table above), and determination that the boundaries of the federal ozone nonattainment area within the MDAQMD have not changed since 2008, the District has determined that Rule 107 is adequate to fulfill the emission statement requirement for the 2015 ozone standard.

# Appendices

## Appendix A – RACT Evaluations

1. Rule 442 – *Usage of Solvents*
2. Rule 461 – *Gasoline Transfer and Dispensing*
3. Rule 462 – *Organic Liquid Loading*
4. Rule 463 – *Storage of Organic Liquids*
5. Rule 464 – *Oil-Water Separators*
6. Rule 1103 – *Cutback and Emulsified Asphalt*
7. Rule 1104 – *Organic Solvent Degreasing Operations*
8. Rule 1106 – *Marine Coating Operations*
9. Rule 1113 – *Architectural Coatings*
10. Rule 1114 – *Wood Products Coating Operations*
11. Rule 1115 – *Metal Parts & Products Coating Operations*
12. Rule 1116 – *Automotive Refinishing Operations*
13. Rule 1117 – *Graphic Arts and Paper, Film, Foil and Fabric Coatings*
14. Rule 1118 – *Aerospace Vehicle Parts and Products Coating Operations*
15. Rule 1157 – *Boilers and Process Heaters*
16. Rule 1159 – *Stationary Gas Turbines*
17. Rule 1160 – *Internal Combustion Engines*
18. Rule 1161 – *Portland Cement Kilns*
19. Rule 1162 – *Polyester Resin Operations*
20. New Rule – *Adhesive Applications*

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1. Rule 442 – *Usage of Solvents*

The MDAQMD includes portions of San Bernardino County that were designated severe nonattainment under the 1-hour ozone standard and are currently designated moderate nonattainment under the 8-hour ozone standard. As such, the MDAQMD is required to impose RACT on all major VOC sources and all source categories subject to a CTG in these nonattainment areas. Major VOC sources and CTG source categories in the MDAQMD are, however, generally covered by other rules in Regulations IV and XI of the MDAQMD SIP. Rule 442 applies only to sources that are *not* subject to any of these source-specific VOC control requirements and is intended as a “backstop” provision for small, otherwise unregulated sources. As such, the rule is not necessary to implement RACT requirements (72 FR 52791, 9/17/07). Rule 442 is not proposed for amendment at this time.

2. Rule 461 – Gasoline Transfer and Dispensing

<b>Rule 461 - Gasoline Transfer and Dispensing</b>	
Amended -01/22/18	
SIP Approval - 60 FR 21702, May 3, 1995	
ATCM - Benzene ATCM - Retail Service Stations (17 CCR §93101)	
MACT - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (40 CFR 63 Subpart R, commencing with §63.420) , National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (40 CFR 63, Subpart BBBBBB, commencing with §63.11080), National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC, commencing with §63.11110) .	
CTG - Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations (EPA-450/R-75-102 1975/11), Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA 450/2-77-026 1977/10), Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051 1978/12), Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA 450/3-83-007 1983/12)	
EPA TSD Recommendations for next rule revision:	n/a
Other District Rules:	BAAQMD Regulation 8, Rule 7 - Gasoline Dispensing Facilities (11/06/2002; 68 FR 14156, 11/06/2002)
	SLOPCD Rule 424 - Storage and Transfer of Gasoline (11/16/16; 58 FR 45442, 08/30/93)
	AVAQMD Rule 461 - Gasoline Transfer and Dispensing (10/21/08; 76 FR 5277, 01/31/11)
	VCAPCD Rule 70 - Storage and Transfer of Gasoline (04/01/09; 76 FR 5277, 01/31/11)
	SCAQMD Rule 461 - Gasoline Transfer and Dispensing (04/06/12; 78 FR 21543, 04/11/13)
Recommendation: No changes recommended at this time.	
Rule 461 - Gasoline Transfer and Dispensing was most recently amended January 22, 2018. This previous rule version was approved in to the SIP (60 FR 21702, May 3, 1995). The TSD issued for Rule 461 in August 1994 identified no deficiencies sufficient for EPA to proposed less than full approval at that time. Additional comments from USEPA have not been recieved for the most recent amendment of Rule 461. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the current version of MDAQMD Rule 461. Therefore, the District concludes that RACT has not changed and the current version of Rule 461 should be approvable as meeting RACT.	

### 3. Rule 462 – Organic Liquid Loading

<b>Rule 462 - Organic Liquid Loading</b>		
Amended -01/22/18		
SIP Approval - 60 FR 21702, May 3, 1995		
ATCM - Benzene ATCM - Retail Service Stations (17 CCR §93101)		
MACT - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (40 CFR 63 Subpart R, commencing with §63.420) , National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (non-Gasoline) (40 CFR 63, Subpart EEEE, commencing with §63.2330)		
CTG - Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks (EPA-450/R-77-036 1977/12), Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA 450/2-78-047 1978/12), Alternative Control Techniques Document - Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 450/R-94-001 1994/01)		
EPA TSD Recommendations for next rule revision:	<ol style="list-style-type: none"> <li>1. Addition of recordkeeping requirements - EPA suggests that daily records must be maintained and retained for at least 2 years.</li> <li>2. EPA recommends that the rule be strengthened further by requiring submerged fill pipes or bottom loading pipes during the transfer of organic fluids.</li> </ol>	
Other District Rules:	EDCAPCD Rule 244 - Organic Liquid Loading and Transport Vessels (11/06/2002)	68 FR 14156, 11/06/02
	BAAQMD Regulation 8, Rule 6 - Organic Bulk Liquid Terminals and Bulk Plants (02/02/94)	60 FR 16799, 04/03/95
	BAAQMD Regulation 8, Rule 44 - Marine Tank Vessel Operations (12/07/05)	58 FR 45442, 07/12/89
	SMAQMD Rule 447 - Organic Liquid Loading (04/02/98)	64 FR 66393, 11/26/99
	SCAQMD Rule 462 - Organic Liquid Loading (05/14/99)	64 FR 39037, 07/21/99
Recommendation: No changes recommended at this time.		
<p>Rule 462 - Organic Liquid Loading was most recently amended January 22, 2018. The previous rule version was approved into the SIP (60 FR 21702, May 3, 1995). The TSD issued for Rule 462 in August, 1994 identified no deficiencies sufficient for EPA to propose less than full approval at that time. The TSD changes were incorporated into the most recent amendment. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the most recent amendment of MDAQMD Rule 461, and therefore do not require further analysis. The District has not received additional comments from EPA on the current amended version. Therefore, the District concludes that RACT has not changed and the current version of Rule 462 should be approvable as meeting RACT.</p>		

4. Rule 463 – Storage of Organic Liquids

Rule 463 - Storage of Organic Liquids	
Amended - January 22, 2018	
SIP Approved Version - November 2, 1992	60 FR 21702, 5/3/1995
Applicable CTG	<ol style="list-style-type: none"> <li>1. <i>Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks</i> (EPA-450/2-78-047 1978/12)</li> <li>2. <i>Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems</i> (EPA-450/2-78-051 1978/12)</li> <li>3. <i>Control of Tank Truck Gasoline Loading Terminals</i> (EPA-450/2-77-026, 1977/10)</li> <li>4. <i>Control of Volatile Organic Emissions from Bulk Gasoline Plants</i> (EPA-450/2-77-035 1977/12)</li> <li>5. <i>Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks</i> (EPA-450/2-77-036 1977/12)</li> </ol>
Other Documents	<p><i>Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations (the "Blue Book")</i></p> <p><i>Guidance Document for Correcting VOC Rule Deficiencies</i></p> <p><i>40 CFR Part 51</i></p> <p><i>EPA TSD for SBCAPCD Rule 463, Storage of Organic Liquids, July 14, 1994</i></p>
Equivalent District Rules	<p>PCAPCD Rule 212 – Storage of Organic Liquids (74 FR 27714, 06/11/2009)</p> <p>PCAPCD Rule 213 – Gasoline Transfer into Stationary Storage Containers (80 FR 7345, 02/10/2015)</p> <p>SCAQMD Rule 463 – Storage of Organic Liquids (78 FR 18854, 11/04/2011)</p> <p>YSAQMD Rule 2.21 – Organic Liquid Storage and Transfer (71 FR 63694, 10/31/2006)</p>
<p>Recommendation: No changes proposed for Rule 463</p> <p>Rule 463 - <i>Storage of Organic Liquids</i> was amended January 22, 2018. The Rule was amended to incorporate RACT requirements, and comments as suggested by USEPA and industry. Additional comments have not not been received from EPA and there is a reasonable assumption that the current requirements of Rule 463 are approvable as RACT based on the lack of comments. There are no equivalent rules from other Districts which have been amended subsequent to the January 22, 2018 amendment that suggest RACT has changed.</p>	

5. Rule 464 – *Oil-Water Separators*

Rule 464 - Oil Water Separators	
Amended - June 23, 2014	
SIP Approved Version - June 23, 2014	80 FR 32026, 06/05/2015
Applicable CTG	Control of Refinery Vacuum Producing Systems, Wastewater Separators and Process Unit Turnarounds (EPA – 450/2-77-025) <i>While this CTG states applicability to petroleum refinery sources, Rule 464 does not specify the refinery industry because this industry is non-existent in the MDAQMD. It applies instead to similar wastewater separator equipment used in other industries .</i>
TSD February 2015	Correct typographical error: Section (G)(3)(a) specifies a CARB test method for analyzing halogenated exempt compounds as being ARB Method 22. The correct test method is ARB Method 422.
Equivalent District Rules	SJVUAPCD Rule 4625 - <i>Wastewater Separators</i> , 12-15-2011 (77 FR 64427, 10/22/2012)
	SCAQMD Rule 1176 - <i>VOC Emissions from Wastewater Systems</i> , 09/13/1996 (67 FR 62376, 10/07/2002)
	BAAQMD Reg 8 Rule 8 - <i>Wastewater Collection and Separation Systems</i> , 09/15/2004 (not shown as SIP version)
Recommendation: No changes proposed for Rule	
Rule 464 - <i>Oil-Water Separators</i> was amended June 23, 2014. The Rule was SIP approved June 5, 2015 (80 FR 32026). There are no equivalent rules from other Districts which have been amended subsequent to the approval that suggest RACT has changed.	

6. Rule 1103 – *Cutback and Emulsified Asphalt*

<b>Rule 1103 - Cutback and Emulsified Asphalt</b>	
Amended - 12/21/1994	
SIP Approval - 61 FR 4215, February 5, 1996	
EPA-450/2-77-037 1977/12; Control of Volatile Organic Emissions from Use of Cutback Asphalt	
EPA TSD Recommendations for next rule revision:	FR approval notes that the group of rules submitted and approved in the notice met applicable requirements of the CAA, EPA requirements, and EPA interpretation of these requirements as expressed in various EPA policy guidance documents referenced in the NPRM cited.
Other District Rules:	BCAPCD Rule 231 - Cutback and Emulsified Asphalt, 01/12/93
	MBUAPCD Rule 425 - Use of Cutback Asphalt, 3/26/97
	SBCAPCD Rule Rule 329 - Cutback Asphalt and Emulsified Asphalt Paving Materials, 2/25/92
	YSAQMD Rule 2.28 - Cutback and Emulsified Asphalts, 5/25/94
	SJVUAPCD Rule 4641 - Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations, 12/17/92
Recommendation: No changes proposed to Rule 1103.	
The District has reviewed similar District rules regulating cutback and emulsified asphalt. Only one rule has been amended subsequent to the MDAQMD SIP Approval, and MDAQMD Rule 1103 and MBUAPCD Rule 425 are substantively identical. This indicates that RACT has not changed for this CTG category.	

7. Rule 1104 – *Organic Solvent Degreasing Operations*

Rule 1104 - Organic Solvent Degreasing Operations	
Amended - April 23, 2018	
SIP Approved Version - April 23, 2018	84 FR 31682, 07/02/2019
Applicable CTG	<i>Control of Volatile Organic Emissions from Solvent Metal Cleaning</i> (EPA-450/2-77-022, November 1977) <i>Control Techniques Guidelines for Industrial Cleaning Solvents</i> (EPA-453/R-06-001, September 2006)
Other Documents	CARB's <i>Organic Solvent Cleaning and Degreasing Operations</i> " (July 18, 1991)
Equivalent District Rules	BAAQMD Reg 8 Rule 4 - <i>General Solvent and Surface Cleaning Operations</i> (10/16/2002; 68 FR 51187, 08/26/2003)
	SJVUAPCD Rule 4663 - <i>Organic Solvent Cleaning, Storage, and Disposal</i> (9/20/2007; 74 FR 37948, 7/30/2009)
	SCAQMD Rule 1171 - <i>Solvent Cleaning Operations</i> (2/1/2008; 76 FR 60376, 9/29/2011)
Recommendation: No changes proposed for Rule 1104	
Rule 1104 - <i>Organic Solvent Degreasing Operations</i> was amended April 23, 2018. The Rule was SIP approved 07/02/2019 (84 FR 31682). There are no equivalent rules from other Districts which have been amended subsequent to the approval that suggest RACT has changed.	

8. Rule 1106 – *Marine Coating Operations*

<b>Rule 1106 - Marine and Pleasure Craft Coating Operations</b>		
Amended - 10/24/16		
SIP Approval - 73 FR 40754, June 16, 2008		
1. MACT - <i>National Emission Standards for Shipbuilding and Ship Repair (Surface Coating) (40 CFR 63 Subpart II, commencing with §63.780)</i> 2. <i>Control Techniques Guidelines for Shipbuilding and Ship Repair Operations (Surface Coating) (EPA-453/R-94-032 1994/04, 61 FR-44050 8/27/96 1996/08),</i> 3. <i>Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, Table 5 (EPA 453/R-08-003 2008/09),</i> 4. <i>Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials (EPA 453/R-08-004 2008/09)</i>		
EPA TSD Recommendations for next rule revision:	Change section (E)(2)(d)(i) to "Guidelines for Determining Capture Efficiency", and 40 CFR 51, Appendix M, Methods 204-204F, as applicable.	
Other District Rules:	SCAQMD Rule 1106.1 - <i>Pleasure Craft Coating Operations</i>	64 FR 47392, 08/31/1999
	BAAQMD Regulation 8, Rule 43 - <i>Surface Preparation and Coating of Marine Vehicles (10/16/2002)</i>	68 FR 61753, 10/30/2003
	AVAQMD Rule 1106.1 - <i>Pleasure Craft Coating Operations</i>	60 FR 18750, 04/13/1995
Recommendation: No changes recommended at this time.		
<p>Rule 1106 - <i>Marine and Pleasure Craft Coating Operations</i> was most recently amended October 24, 2016. This rule was approved in to the SIP (73 FR 40754, June 16, 2008) and determined to fulfill RACT. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the most recent amendment of MDAQMD Rule 1106, and therefore do not require further analysis. The TSD issued for Rule 1106 in June 2008 identified no deficiencies sufficient for EPA to proposed less than full approval at that time, but one item was recommended for consideration for the next rule revision. The item recommended for revision is a test method, and not of a substantive nature that would affect the RACT determination. The District will address the comment when next amended.</p>		

9. Rule 1113 – *Architectural Coatings*

<b>Rule 1113 - <i>Architectural Coatings</i></b>	
Amended - 04/23/12	
SIP Approval - 79 FR 365, January 3, 2014	
1. EPA's National Volatile Organic Compound Emission Standard for Architectural Coatings (40 CFR Part 59, Subpart D) 2. CARB's Suggested Control Measures for Architectural Coatings (October 26, 2007)	
EPA TSD Recommendations for next rule revision:	<p>1. A typographical error in section (B)(4) can be corrected. The term "Aluminium Roof" should also contain the word "coating" to clarify the definition is for a type of coating.</p> <p>2. In section (G)(5)(a), the acid content test method can be updated from ASTM D1613-96 to ASTM D1613-06.</p> <p>3. In section (G)(1)(a), the rule should address how to calculate VOC content if the manufacturer recommends thinning. We suggest adding the following sentence: "If the manufacturer recommends thinning, the VOC content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer."</p> <p>4. Consider addressing colorants which are added at the point of sale. South Coast Air Quality Management District Rule 1113 Architectural Coatings section (c)(2) requirements and Table of Standards 2 sets VOC limits for colorants added to coatings at the point of sale.</p>
Other District Rules:	<p>SCAQMD Rule 1113 - <i>Architectural Coatings</i> (02/05/2016; not version in SIP)</p> <p>SDCAPCD Rule 67.0.1 - <i>Architectural Coatings</i> (06/24/2015; 81 FR 68320, 10/04/2016)</p> <p>AVAQMD Rule 1113 - <i>Architectural Coatings</i> (06/18/2013; 80 FR 76222, 12/08/2015)</p> <p>BAAQMD Regulation 8, Rule 3 - <i>Architectural Coatings</i> (07/01/2009; not version in SIP)</p> <p>FRAQMD Rule 3.15 - <i>Architectural Coatings</i> (08/04/2014; 80 FR 76222, 12/08/2015)</p>
Recommendation: Update rule to include revised SCM provisions and EPA recommendations.	
Rule 1113 - <i>Architectural Coatings</i> was most recently amended April 23, 2012. This rule was approved in to the SIP (79 FR 365, January 3, 2014). In this approval, EPA notes that Rule 1113 regulates an area source and is not required to fulfill RACT. In 2019, CARB updated the Suggested Control Measure for Architectural Coatings. While not required for RACT, the MDAQMD will be amending Rule 1113 in response to the amended SCM, and will also address the recommendations in the TSD.	

10. Rule 1114 – Wood Products Coating Operations

Amended - 01/22/18	
SIP Approval - 84 FR 31682, July 2, 2019	
ATCM - <i>ATCM to Reduce Formaldehyde Emissions from Composite Wood Products (17 CCR §93120 et seq.)</i>	
MACT - <i>National Emission Standards for Wood Furniture Manufacturing (40 CFR 63 Subpart JJ, commencing with §63.800), National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products (40 CFR 63, Subpart DDDD, commencing with §63.2230), National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products (40 CFR 63, Subpart QQQQ, commencing with §63.4680)</i>	
CTG - <i>Control Volatile Organic Emissions from Existing Stationary Sources - Volume VII: Factory Surface Coating of Flat Wood Paneling (EPA-450/2-78-032 1978/06), Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations (EPA-453/R-96-007 1996/04), Control Techniques Guidelines for Flat Wood Paneling Coatings (EPA-453/R-06-004</i>	
EPA TSD Recommendations for next rule revision:	<p>1. Section (D)(5) - Facilities using less than 55 gallons per year of wood product coatings and/or strippers are exempt from the requirements of this rule, except for monitoring and recordkeeping. While Placer County APCD Rule 236 also contains this limit, San Joaquin Valley Unified APCD Rule 4606, Bay Area AQMD Rule 8-32, and Santa Barbara APCD Rule 351 exempt facilities using up to 20 gallons per year, which appears to be more stringent. We recommend making the provision as stringent as these other district rules.</p> <p>2. The VOC limit for "High-Solids Stains" in Table 1 is 350 g/l. The limit in SJVUAPCD Rule 4606 is 240 g/l for this category. We recommend lowering the limit to 240 g/l</p> <p>3. Consistent with the "CTG for Emissions from Wood Furniture Manufacturing Operation" (EPA-453/R-96-007, April 1996) section B.5, we recommend the rule add a requirement that the operator prepare and maintain a written work practice implementation plan.</p>
Other District Rules:	SJVUAPCD Rule 4606 - <i>Wood Products and Flat Wood Paneling Product Coating Operations (10/16/2008; 74 FR 52894, 10/15/2009)</i>
	BAAQMD Regulation 8, Rule 23 - <i>Coating of Flat Wood Paneling and Wood Flat Stock (12/20/1995; 62 FR 66998, 12/23/1997)</i>
	BAAQMD Regulation 8, Rule 32 - <i>Wood Products Coatings (08/05/2009; 62 FR 66998, 12/23/1997)</i>
	SBAPCD Rule 351 - <i>Surface Coating of Wood Products (08/20/1998; 65 FR 15240, 03/22/2000)</i>
Recommendation: Update rule to include EPA recommendations.	
Rule 1114 - <i>Wood Products Coating Operations</i> was most recently amended January 22, 2018. This rule was approved in to the SIP (63 FR 44132, August 18, 1998) and determined to fulfill RACT for the 1997 and 2008 ozone NAAQS. The District has examined wood products coating rules for Districts with similar or more severe attainment status and has identified no rule(s) which have been amended subsequent to the most recent MDAQMD amendment. The TSD issued for Rule 1114 on November 1, 2018 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items were recommended for consideration for the next rule revision. Rule 1114 may be amended to incorporate these recommendations.	

11. Rule 1115 – *Metal Parts & Products Coating Operations*

<b>Rule 1115 - Metal Parts and Products Coating Operations</b>	
Amended - 01/22/18	
SIP Approval - 62 FR 67002, December 23, 1997	
<p>1. <i>Control of Volatile Organic Emissions from Existing Stationary Sources - Volume VI: Surface Coating of Miscellaneous Metal Parts and Products</i> (EPA 450/2-78-015 1978/06),</p> <p>2. <i>Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, Table 2</i> (EPA 453/R-08-003 2008/09)</p> <p>3. <i>Control Techniques Guidelines: Industrial Cleaning Solvents</i> (EPA 453/R-06-001, September 2006)</p>	
1997 EPA TSD Recommendations	<p>1. Compliance records are required to be kept on-site for at least two years (see Section (F)(3)); EPA recommends that records be maintained on site for five years.</p> <p>2. Section (C)(6), "Prohibition of Sale" should be reinserted within the Rule. (Corrected 1/22/18)</p>
Other District Rules:	<p>AVAQMD Rule 1107 - <i>Coating of Metal Parts and Products</i> (03/08/1996; 60 FR 36227, 07/14/1995)</p> <p>BAAQMD Regulation 8, Rule 19 - <i>Surface Preparation and Coating of Miscellaneous Metal Parts and Products</i> (02/03/1993; 69 FR 62588, 10/27/2004)</p> <p>BAAQMD Regulation 8, Rule 19 - <i>Surface Preparation and Coating of Large Appliances and Metal Furniture</i> (10/16/2002; 69 FR 62588, 10/27/2004)</p> <p>SCAQMD Rule 1107 - <i>Coating of Metal Parts and Products</i> (01/06/2016; version not shown as SIP approved)</p>
Recommendation: Update rule to include verbal EPA comment.	
<p>Rule 1115 - Metal Parts and Products Coating Operations was most recently amended January 22, 2018. This rule was approved in to the SIP (62 FR 67002, December 23, 1997) and determined to fulfill RACT for the 1990 amendment of the Clean Air Act. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the most recent amendment of MDAQMD Rule 1115. The TSD issued for Rule 1115 in December 1997 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items were recommended for consideration for the next rule revision. The District incorporated the 1997 TSD recommendations in the January 22, 2018 amendment. The District has received a verbal comment from EPA that this rule needs to have a 10 tpy exemption removed to conform with 2.7 tpy CTG limit. Rule 1115 will be amended to incorporate this provision.</p>	

12. Rule 1116 – Automotive Refinishing Operations

<b>Rule 1116 - Automotive Refinishing Operations</b>	
Amended - 08/23/10	
SIP Approval - 77 FR 47536, August 9, 2012	
<p>1. <i>Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks, (FND Section 6) (EPA 450/2-77-008 1977/05)</i></p> <p>2. <i>Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015, 1978/06)</i></p> <p>4. <i>Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings , (FND Table 6) (EPA-453/R-08-003, 2008/09)</i></p> <p>5. <i>Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings (EPA 453/R-08-006 2008/09) (FND)</i></p> <p>6. <i>Protocol for Determining the Daily Volatile Organic Compounds Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations (EPA 453/R-08-002 2008/09) (FND)</i></p> <p>7. CARB SCM for Automotive Coatings, October 20, 2005</p>	
EPA TSD Recommendations for next rule revision:	1. Section (C)(7)(a) refers to three exceptions to the requirements of (C)(1). This should be included in Section (D) exemptions.
	2. (F)(1)(b) and (F)(1)(c) appear to have typos in numbering
	3. (G)(2)(b)(i), Test Method for Determination of Emissions-Operations with Emission Control Systems, refers to EPA Reference Methods 25, 25A or 25B, and should also include the full titles of the methods.
	4. Please also add titles to the methods listed in (G)(2)(C)(i).
	5. Section (G)(2)(h)(i), Test Method for Exempt Compound Concentration, refers to CARB Method 422, "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" (January 22, 1987). That method was amended and accepted on December 13, 1991.
Other District Rules:	SDAPCD Rule 67.20.1 - <i>Motor Vehicle and Mobile Equipment Coating Operations (06/30/10; not SIP approved)</i>
	SCAQMD Rule 1151 - <i>Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations (09/05/14; 80 FR 76219, 12/08/15)</i>
	BAAQMD Regulation 8, Rule 45 - <i>Motor Vehicle and Mobile Equipment Coating Operations (12/03/08; 65 FR 34101, 05/26/00)</i>
	FRAQMD Rule 3.19 - <i>Motor Vehicle and Mobile Equipment Coating Operations (08/01/16; 42 FR 42219, 08/22/77)</i>
Recommendation: No changes recommended at this time.	
<p>Rule 1116 - <i>Automotive Refinishing Operations</i> was most recently amended August 23, 2010. This rule was approved in to the SIP (77 FR 47536, August 9, 2012) and determined to fulfill RACT requirements of CAA §182(b)(2) and §182(f). The District has examined similar rules for Districts with similar or more severe attainment status and has determined that some have been amended subsequent to the most recent amendment of MDAQMD Rule 1116, and SCAQMD Rule 1151 was included in the SIP after the SIP approval of MDAQMD Rule 1116. Coating limits in MDAQMD Rule 1116 are consistent with those in SCAQMD Rule 1151 and FRAQMD Rule 3.19 and further analysis is not necessary. The TSD issued for Rule 1116 in April 2012 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items were recommended for consideration for the next rule revision. These recommendations are not of a substantive nature that would affect the RACT determination. The District will address these recommendations when the rule is next amended.</p>	

13. Rule 1117 – *Graphic Arts and Paper, Film, Foil and Fabric Coatings* (

<b>Rule 1117 - <i>Graphic Art and Paper, Film, Foil, and Fabric Coatings</i></b>	
Amended - 09/28/09	
SIP Approval - 77 FR 12495, March 1, 2012	
<p>1. <i>Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks</i> (EPA-450/2-77-008, 1977/05)</p> <p>2. <i>Control of Volatile Organic Emissions from Existing Stationary Sources - Volume VIII: Graphic Arts-Rotogravure and Flexography</i> (EPA-450/2-78-033 1978/12)</p> <p>3. <i>Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing</i> (EPA-453/R-06-002 2006/09)</p> <p>4. <i>Control Techniques Guidelines for Flexible Package Printing</i> (EPA-453/R-06-003 2006/09)</p>	
EPA TSD Recommendations for next rule revision:	<p>1. Section B, Definitions:</p> <p>a. Subsection (20) - "Doctor Blade" - Consider removing the word "steel" as there are doctor blades that are not steel.</p> <p>b. Subsection (25) - Please correct spelling error in the word "Electrophotography"</p> <p>c. Subsection (27) - "Exempt Compound" - Consider adding "VOC" or, as SJVUAQMD has done, adding "Organic" before "Compound" to more succinctly describe the exempt compound.</p> <p>d. Subsection (56) - "Liquid Leak" should apply to all coatings, ink, and solvents. Consider deleting the word "Solvent" to more accurately describe a liquid leak. This will also make the definition of "Non-Leaking Container" in subsection (68) more comprehensive.</p> <p>e. Subsection (110) - "Wash Primer" - for clarity, please rephrase definition to "A material that contains no more than 5%, by weight, solid materials, and that is used to clean and/or to activate surfaces of paper or fabric."</p> <p>2. Section F, Test Methods:</p> <p>a. Subsection (2) - Please add the date December 13, 1991 to ARB Method 422.</p> <p>b. Subsection (4) - Please revise SCAQMD Test Method 318 to Test Method 318-95 and add the date, July 1996, after the title. Additionally, please note that the use of this method for metals other than aluminium requires validation.</p>
Other District Rules:	<p>YSAQMD Rule 2.29 - <i>Graphic Arts Printing Operations</i> (07/11/18; version not in SIP)</p> <p>SCAQMD Rule 1130 - <i>Graphic Arts</i> (05/02/14; 80 FR 40915, 07/14/15)</p> <p>SDAPCD Rule 67.16 - <i>Graphic Arts Operations</i> (05/09/12; 77 FR 58313, 09/20/12)</p> <p>SMAQMD Rule 450 - <i>Graphic Arts Operations</i> (10/23/08; 75 FR 18068, 04/09/10)</p>
Recommendation: Update rule to include EPA recommendations.	
<p>Rule 1117 - <i>Graphic Art and Paper, Film, Foil, and Fabric Coatings</i> was most recently amended September 28, 2009. This rule was approved in to the SIP (77 FR 12495, March 1, 2012) and determined to fulfill RACT requirements. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that some have been amended subsequent to the most recent amendment of MDAQMD Rule 1117, and SCAQMD Rule 1130 was included in the SIP after the SIP approval of MDAQMD Rule 1117 and therefore may require further analysis. The TSD issued for Rule 1117 in October 2011 identified no deficiencies sufficient for EPA to propose less than full approval at that time, but several items was recommended for consideration for the next rule revision. These recommendations do not appear to be substantive. The District will evaluate these recommendations, and review SCAQMD and YSAQMD rule limits, specifically for fountain solution, to determine if they affect current RACT. Rule 1117 may be amended to incorporate these provisions.</p>	

14. Rule 1118 – Aerospace Vehicle Parts and Products Coating Operations

<b>Rule 1118 - Aerospace Assembly Rework and Component Manufacturing Operations</b>	
Amended - October 26, 2015	
SIP Approval - 82 FR 28240, June 21, 2017	
CTG - <i>Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (December 1997, EPA-453/R-97-004)</i>	
EPA TSD Recommendations for next rule revision:	<ol style="list-style-type: none"> <li>1. Lower Adhesion Promoter Coating limit from 850 g/l, consistent with, e.g., SCAQMD Rule 1124 limit of 250 g/l.</li> <li>2. Lower Flight-Test Coating (All Other) limit from 840 g/l, consistent with, e.g., SJVAPCD Rule 4605 limit of 600 g/l.</li> <li>3. Correct phrasing in paragraph (C)(2)(b)(ii) to state that “The VOC composite partial pressure is 9.5 mm Hg (0.18 psia) or less at 20°C (68°F).”</li> <li>4. Remove Exemption G(7), “The provisions of subsection (C)(1) shall not apply to the recoating of assembled Aircraft at Rework facilities if the original Coatings are used.” This provision is not included in the Aerospace CTG and the Aerospace NESHAP (40 CFR Part 63, Subpart GG). However, this is unlikely to have a significant emissions impact because, among other reasons, MDAQMD staff explained that MDAQMD does not have significant rework facilities or any indication of any rework coating operations employing exemption G(7).</li> </ol>
Other District Rules:	<p>SCAQMD Rule 1124 - <i>Aerospace Assembly and Component Manufacturing Operations</i> (9/21/2001; 67 FR 52611, 8/13/2002)</p> <p>BAAQMD Regulation 8, Rule 29 - <i>Aerospace Assembly and Component Coating Operations</i> (12/20/1995; 62 FR 66998, 12/23/1997)</p> <p>SBCAPCD Rule 337 - <i>Surface Coating of Aerospace Vehicles and Components</i> (6/21/2012; 78 FR 21538, 4/11/2013)</p> <p>SJVUAPCD Rule 4605 - <i>Aerospace Assembly and Coating Manufacturing Operations</i> (6/16/2011; 76 FR 70886, 11/16/2011)</p> <p>AVAQMD Rule 1124 - <i>Aerospace Assembly and Component Manufacturing Operations</i> (8/20/2013; 80 FR 60040, 10/5/2015)</p>
Recommendation: Update rule to include EPA recommendations. The SCAQMD, SJVUAPCD and AVAQMD rules were all referenced in the previous amendment process.	
Rule 1118 - Aerospace Assembly Rework and Component Manufacturing Operations was most recently amended October 26, 2015. This rule was approved in to the SIP ( 82 FR 28240, June 21, 2017) and determined to fulfill RACT. The District has examined similar rules for Districts with similar or more severe attainment status and has determined that these rules have not been amended subsequent to the most recent amendment of MDAQMD Rule 1118, and therefore do not require further analysis. The TSD issued for Rule 1118 in November 2016 identified no deficiencies sufficient for EPA to proposed less than full approval at that time, but four items were recommended for consideration for the next rule revision. Rule 1118 may be amended to incorporate these provisions.	

15. Rule 1157 – *Boilers and Process Heaters*

Rule 1157 - <i>Boilers and Process Heaters</i>	
Amended - January 22, 2018	
SIP Approved Version - May 19, 1997	64 FR 19227, April 20, 1999
Applicable CTG	N/A
Other Documents	ACT Document - <i>NOx Emissions from Industrial, Commercial and Institutional Boilers</i> (EPA 453/R-94-022, 03/1994)
	ACT Document - <i>NOx Emissions From Utility Boilers</i> (EPA-453/R-94-023, 03/1993)
	ACT Document - <i>NOx Emissions from Process Heaters</i> (EPA-453/R-93-034, 09/1993)
	<i>NO<sub>x</sub> RACT for the Repowering of Utility Boilers</i> , USEPA Office of Air Quality Planning and Standards, March 9, 1994.
Equivalent District Rules	ICAPCD Rule 400.2 – <i>Boilers, Process Heaters and Steam Generators</i> , 2/23/2010 (78 FR 896, 01/07/2013)
	Sacramento Metro Air Quality Management District (SMAQMD) Rule 411 – <i>NOx from Boilers, Process Heaters and Steam Generators</i> , 8/23/2007 (74 FR 20880, 05/06/2009)
	San Joaquin Air Pollution Control District (SJAPCD) Rule 4352 – <i>Solid Fuel Fired Boilers, Steam Generators and Process Heaters</i> , 12/15/2011 (77 FR 66548, 11/06/2012)
	South Coast Air Quality Management District (SCAQMD) Rule 1146 - <i>Emission of Oxides of Nitrogen from industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters</i> 12/7/2018
	SBCAPCD Rule 342 - <i>Boilers, Steam Generators, and Process Heaters</i> (5 MMBtu/hr and greater), 6/20/2019
Recommendation: No changes proposed for Rule 1157	
MDAQMD Rule 1157 - <i>Boilers and Process Heaters</i> was amended January 22, 2018. The Rule was amended to incorporate verbal comments suggested by USEPA. Additional comments have not been received from EPA and there is a reasonable assumption that the current requirements of Rule 1157 are approvable as RACT based on the lack of comments. SCAQMD and SBCAPCD have both amended their rules subsequent to January 22, 2018. Neither rule is indicated as a SIP approved rule, or determined to fulfill RACT. Both rules have been reviewed and MDAQMD limits are consistent with applicable categories and requirements.	

16. Rule 1159 – *Stationary Gas Turbines*

Rule 1159 - Stationary Gas Turbines	
Amended - September 28, 2009	
SIP Approved Version - September 28, 2009	77 FR 65133, October 25, 2012 (LA/LD, RACT for nonattainment area)
Applicable CTG	N/A
Other Documents	<i>Alternative Control Technology Document, Nox Emissions from Stationary Gas Turbines (EPA 453/R-93-007, 04/1993)</i>
	<i>Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (69 FR 10537, March 5, 2004)</i>
	<i>Subpart GG - Standards of Performance for Stationary Gas Turbines (2/25/09)</i>
	<i>Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (71 FR 38497, July 6, 2006)</i>
Equivalent District Rules	SCAQMD Rule 1134 - <i>Emissions of Oxides of Nitrogen From Stationary Gas Turbines (08/08/1997, 65 FR 46873, 8/1/2000)</i>
	SMAQMD Rule 413 - <i>Stationary Gas Turbines (03/24/ 2005; 73 FR 1819, 1/10/2008)</i>
	SJVUAPCD Rule 4703 - <i>Stationary Gas Turbines (09/20/2007; 74 FR 53888, 10/21/2009)</i>
	SDCAPCD Rule 69.3 - <i>Stationary Gas Turbine Engines - RACT (12/16/1998; version not in SIP)</i>
	BAAQMD Reg 9 Rule 9 - <i>Nitrogen Oxides and Carbon Monoxide from Stationary Gas Turbines (12/06/2006; version not in SIP)</i>
	VCAPCD Rule 74.23 - <i>Stationary Gas Turbines (01/08/2002; 68 FR 33018, 06/03/2003)</i>
Recommendation: No changes proposed for Rule 1159	
Rule 1159 - Stationary Gas Turbines was amended September 28, 2009. The Rule was amended to incorporate RACT requirements in the FONAs. The Limited Disapproval is for the attainment area not subject to RACT. There are no equivalent rules from other Districts which have been amended subsequent to the September 28, 2009 amendment that suggest RACT has changed.	

17. Rule 1160 – *Internal Combustion Engines*

Rule 1160 - Internal Combustion Engines	
Amended - January 22, 2018	
SIP Approved Version - October 26, 1994	61 FR 56470, November 1, 1996
Applicable CTG	N/A
Other Documents	Alternative Control Techniques Document – NO <sub>x</sub> Emissions from Stationary Reciprocating Internal USEPA’s Economic Incentive Programs Guidance (EPA-452/R-01-001)
Equivalent District Rules	SCAQMD Rule 1110.2 - <i>Emissions from Gaseous- and Liquid- Fueled Engines</i> (June 3, 2016; not SIP version) SJVUAPCD Rule 4701 - <i>Internal Combustion Engines - Phase I</i> (August 21, 2003; 69 FR 28061, 5/18/2004) SJVUAPCD Rule 4702 - <i>Internal Combustion Engines (Certified Equipment for Internal Combustion Engines)</i> (November 14, 2013; 81 FR 24029, 04/25/2016) BAAQMD Regulation 9 Rule 8 - Nitrogen Oxides and Carbon Monoxide From Stationary Internal Combustion Engines (July 25, 2007; not SIP version)
Recommendation: No changes proposed for Rule 1160	
Rule 1160 - Internal Combustion Engines was amended January 22, 2018. The Rule was amended to satisfy RACT requirements as evaluated by the availability, feasibility and cost-effectiveness of applying combustion source control measures related to internal combustion engines within the MDAQMD. Additional comments have not not been received from EPA and there is a reasonable assumption that the current requirements of Rule 1160 are approvable as RACT based on the lack of comments. There are no equivalent rules from other Districts which have been amended subsequent to the January 22, 2018 amendment that suggest RACT has changed.	

18. Rule 1161 – *Portland Cement Kilns*

Rule 1161 - Portland Cement Kilns	
Amended - January 22, 2018	
SIP Approved Version - March 25, 2002	68 FR 9015, February 27, 2003
Applicable CTG	N/A
Other Documents	<i>NO<sub>x</sub> Emissions from Cement Manufacturing</i> (EPA 453/R-94-004, 03/1994)
	<i>NO<sub>x</sub> Control Technologies for the Cement Industry: Final Report</i> (EPA 457/R-00-002, 09/2000)
	<i>The Texas Commission on Environmental Quality in Section 117.3110 – Cement Kilns, Emission Specifications</i> , May 23, 2007.
Equivalent District Rules	BAAQMD Reg 9 Rule 13 - <i>Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing</i> (October 19, 2016; Not shown in SIP)
	SCAQMD Rule 1112 - Emissions of Nitrogen from Cement Kilns (June 6, 1986) - No sources
	SCAQMD Rule 1112.1 - Emissions of PM and CO from Cement Kilns (December 4, 2009) - No sources
	EKAPCD Rule 425.3 - <i>Portland Cement Kilns (Oxides of Nitrogen)</i> (March 8, 2018; Not SIP version)
	EKAPCD Rule 406.2 - <i>Process Weight-Portland Cement Kilns</i> (April 18, 1972; 37 FR 19812, 09/22/1972)
Recommendation: No changes proposed for Rule 1161	
Rule 1161 - Portland Cement Kilns was amended January 22, 2018. The Rule was amended to incorporate RACT requirements as suggested by USEPA. Additional comments have not not been received from EPA and there is a reasonable assumption that the current requirements of Rule 1161 are approvable as RACT based on the lack of comments. There are no equivalent rules from other Districts which have been amended subsequent to the January 22, 2018 amendment that suggest RACT has changed.	

19. Rule 1162 – *Polyester Resin Operations*.

<b>Rule 1162 - Polyester Resin Operations Operations</b>	
Amended - April 23, 2018	
SIP Approval - 73 FR 70883, November 24, 2008	
EPA 453/R-08-004 2008/09; Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials 40 CFR 63 Subpart VVVV-National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing, 66 FR 44232, August 22, 2001	
EPA TSD Recommendations for next rule revision:	<ol style="list-style-type: none"> <li>1. Adopt a 90% overall control efficiency as in SCAQMD Rule 1162 and VCAPCD Rule 74.14. <i>This provision updated.</i></li> <li>2. Review exemptions and consider lowering them consistent with the practices of sources operating within the District, or removing them when not used by District facilities. <i>Exemptions updated pursuant to USEPA comment.</i></li> </ol>
Other District Rules:	<p>SCAQMD Rule 1162 - <i>Polyester Resin Operations Operations</i> (7/8/2005; 76 FR 44493, 7/26/2011)</p> <p>BAAQMD Regulation 8, Rule 50 - <i>Polyester Resin Operations</i> (12/2/2009; 62 FR 66998, 12/23/1997)</p> <p>Eastern Kern Rule 432 - <i>Polyester Resin Operations</i> (3/13/2014; 80 FR 32026, 6/5/2015)</p> <p>SJVUAPCD Rule 4684 - <i>Polyester Resin Operations</i> (8/18/2011; 77 FR 5709, 2/6/2012)</p> <p>AVAQMD Rule 1162 - <i>Polyester Resin Operations</i> (5/13/1994; 80 FR 60040, 10/5/2015)</p>
Recommendation: No changes proposed to Rule 1162.	
<p>Rule 1162 - <i>Polyester Resin Operations</i> was amended on August 28, 2017 and then subsequently on April 23, 2018. The Rule was significantly amended to address substantive comments made by USEPA. All comments were addressed and incorporated. Additional comments have not been received from EPA and there is a reasonable assumption that the current contents of Rule 1162 are approvable as RACT based on the lack of comments. There are no equivalent rules from other Districts which have been amended subsequent to April 23, 2018 that might have moved RACT.</p>	

20. New Rule – *Adhesive Applications*

The CTG for Miscellaneous Industrial Adhesives (EPA-453/R-08-005, September 2008) applies to each miscellaneous industrial adhesive application process at a facility where the total actual VOC emissions from all miscellaneous industrial adhesive application processes, including related cleaning activities, at that facility are equal to or exceed 6.8 kg/day (15 lb/day), or an equivalent level such as 3 tons per 12-month rolling period, before consideration of controls. The miscellaneous industrial adhesives product category does not include adhesives that are addressed by CTGs already issued for categories listed under CAA Section 183(e) or by earlier CTGs. These include the CTGs issued under Section 183(e) for aerospace coatings; metal furniture coatings; large appliance coatings; flat wood paneling coatings; paper, film, and foil coatings; offset lithographic printing and letterpress printing; and flexible package printing. Coil coating, fabric coating, and rubber tire manufacturing were not listed under CAA Section 183(e), however, they were the subject of earlier CTGs which address adhesives used in those processes. Motor vehicle adhesives, glass bonding primers, and weatherstrip adhesives that are used at a facility that is not an automobile or light-duty truck assembly coatings facility, are addressed in this CTG for miscellaneous industrial adhesives. The MDAQMD has several rules which address adhesive application, but not all categories in the CTG are addressed by District rule. Therefore, the District commits to evaluating these CTG categories further, and if necessary, will adopt a new adhesives application rule.